

2020-2021 Opportunity to Learn Data – Technical Documentation Technology Hardware, Connectivity and Education Delivery Models

INTRODUCTION

The pandemic ushered in a set of challenging learning conditions across Ohio, the nation and the world. These disruptions affected, in many cases, a student's *opportunity to learn*. Opportunity to learn refers to a student's ready access to regularly offered educational opportunities—even in the most challenging of circumstances.

The U.S. Department of Education provided all states the opportunity to seek accountability and school improvement identification waivers from requirements for the 2020-2021 school year. This flexibility was granted to states provided they met additional new reporting requirements. One of those reporting requirements was to make publicly available all data on access to technology devices and high-speed internet, disaggregated by the federally required student subgroups.

In March 2021, the Ohio General Assembly passed legislation in House Bill 67 to require the Ohio Department of Education to seek this federal waiver for accountability and school improvement identification. Governor DeWine signed the bill with an immediate effective date on March 20, 2021. The Department submitted the waiver request on April 13, 2021 and received approval from the U.S. Department of Education on April 21, 2021. The full text of the waiver request and approval are available on the [Department's Every Student Succeeds Act website](#).

Additionally, in March 2021, State Board of Education members began discussing the importance of publicly reporting the learning models used across the state throughout the 2020-2021 school year. While not federally required, the Department has reported this data throughout the year on the [Data Insights page and weekly Reset/Restart updates](#).

The data are for informational purposes only. There are no letter grades issued this year for any measure or component, but if there were grades, these data would not factor into the report card calculations. The data help paint a picture of the students' opportunity to learn and provide important context for student performance during the 2020-2021 school year. This information is reported for recovery, resource and improvement planning.

In addition, due to the timing of this new data reporting requirement and the general challenges faced by districts during the 2020-2021 school year, reporting this data to the state department was optional for districts. If a district did not enter the status for a student into their Education Management Information System (EMIS) data set, then the student counts as "unknown" in the displayed numbers.

EDUCATION DELIVERY MODEL DATA

Reporting Display

Districts decided locally whether to open their schools for full-time, in-person classes, or whether they offered a hybrid learning model or a model that was 100% remote. Many districts changed their model across the year to adapt to the ever changing conditions of the pandemic. For this reason, the education delivery model data will be reported on school and district report cards based on three distinct time periods.

The primary learning model for the school, and for the district, will be reported for:

1. Fall, which includes the dates from August 1, 2020, to November 30, 2020

2. Winter, which includes the dates from December 1, 2020, to February 28, 2021
3. Spring, which included the dates from March 1, 2021, to June 30, 2021.

The learning model options are: *Five Days in Person, Hybrid, and All Students Remote.*

Data Collection

The Primary Education Learning Model data were reported by districts in EMIS, and similar information also was collected in a survey by the Educational Service Centers (ESCs). In EMIS, the data were reported in the Organization General Information (DN) Record during the End of Year Student Collection, which was open from May 6, 2021 to July 14, 2021. Community schools reported these data during the SOES End of Year Student Collection from January 4, 2021 to July 14, 2021.

Districts had the option to report one of four options to describe the learning model being used by the school or district. These options included:

1. **Five Days In Person = 5DAYIN** All students have the option of in-person instruction each school day, even if schedules are somewhat adjusted
2. **All Students Remote = REMOTE** All students receive only remote education, which may include teacher-led instruction or student-paced learning
3. **Hybrid = HYBRID** A mix of in-person and remote education, which may involve different groups of students in the building each day (i.e., students are in the building every day, but not all students, and students complete remote work on days they are not in the building)
4. **Closed = CLOSED** The building is closed for in-person instruction, and remote education is not being provided. This would be unusual and would not be reported for planned days off or for days that would normally be considered calamity days (such as weather-related or utility related issues on days when students were expected to be in-person.) This could occur if a district is planning remote instruction but experiences an extended outage of the systems needed to complete remote instruction, or if not enough staff were available to open school due to quarantine or illness and a lack of available substitutes.

Reporting Business Rules

Since two sources of data exist, the Department will use a combination of data elements to build the most complete picture of the education delivery model used throughout the year. Since EMIS is the official source for most data elements, these data were used if they were reported, and the ESC data were used only to 'fill in' cases where EMIS data were missing.

The process pulls in data reported on the DN record where the Attribute Name field = "EDUMODELDB" using the following business rules:

- If only one DN record was reported with this Attribute Name, then the education model reported in the Attribute Text field was assumed to be the model in place for the remainder of the year.
- If multiple DN records were reported, the records were ordered by the start date reported in the Attribute Date field. The education model reported in the Attribute Text field was assumed to be the model in place from the start date reported on the record until the start date reported on the next record minus one day.
- If no building-level records were reported by a district, then the buildings were assumed to follow the same pattern as the district.

If no DN records were reported or if there were gaps in the data reported, then the models were pulled from the ESC Survey data, if provided. In calculating the days per model, only days in session were included. A day was considered to be in session if it was reported by the district as being in session on any calendar. Days were totaled by Educational Model for the Fall, Winter, and Spring date ranges shown above. The model with the highest number of days in each time period is the model displayed on the report cards.

TECHNOLOGY HARDWARE

Reporting Display

This data will be displayed as percentages at the school and district level for each of the reporting categories described below. Two tabs of information will be displayed on the report cards. The first tab will report the school or district overview, which will show aggregated data for all students in the school or district. On the second tab, readers will see the school or district data disaggregated by the federally required student groups.

Data Collection

Having access to hardware at home was very important for students who had to take their education remotely or in a hybrid setting. In order to increase transparency on this issue, the U.S. Department of Education is requiring states to publish all available data on student access to technology devices and high-speed internet. This data must also be disaggregated by student subgroups as available.

These data are generated using a combination of Organization-General Information (DN) records and Student Program (GQ) records and were reported during the End of Year Student Collection, which was open from May 6, 2021, to July 14, 2021. Community schools reported these data during the SOES End of Year Student Collection from January 4, 2021, to July 14, 2021.

The following program code options were available to report students' technology access at home:

1. **700201** – District Provided Computer: The student's school or district provides a desktop, laptop, or tablet for the student to use to complete schoolwork at their primary residence.
2. **700212** – Student Access to Computer: The student has regular access to a desktop, laptop, or tablet, not provided by the student's school, for the student to use to complete schoolwork at their primary residence.
3. **700234** – Student Access to Smartphone: The student has regular access to a smartphone for the student to use to complete schoolwork at their primary residence.
4. **700245** – No Regular Access to Hardware: The student does not have regular access to a desktop, laptop, tablet, or smartphone for the student to use to complete schoolwork at their primary residence.
5. **700299** – Unknown Access to Hardware: The student's access to a desktop, laptop, tablet, or smartphone for the student to use to complete schoolwork at their primary residence is unknown.

The Organization-General Information (DN) record included an attribute called **LEAPRVHARD**, which was reported if the district provides computer hardware (including desktops, laptops, or tablets) to all students in one or more grade levels for use in completing schoolwork at their primary residence. Districts using this element for groups of students in one or more grades did not have to report the program codes for the individual students so both sources of data were used in the calculation.

Reporting Business Rules

Calculations for *Technology Access at Home* first use the data from the DN record to assign students to the appropriate 'bucket' for display on the report card. If a district provided hardware for all students in a grade or

grade range, this information will be reported in the DN record and those students will be added to the bucket called “District Provided Computer.”

In the DN record’s “Attribute Text field” the district will provide the grade or grade range of students for whom hardware is provided.

- If a district provides hardware to students in a single grade or in a contiguous grade range, then only one record needs to be reported. For example, a district providing hardware to students in grades 3 through 7 should report a single record with “3–7”.
- If a district provides hardware to students in multiple non-contiguous grades or grade ranges, then the district will report multiple DN records. For example, a district providing hardware to students in grade 3 and students in grade 7 through grade 12 should report two records: one with “3” and one with “7–12”.

In cases where a district has not submitted the DN record to report that all students in a grade or grade range received hardware, the calculation will use the Student Program (GQ) records associated with individual students to build the percentages.

The GQ records indicate whether a student had technology access at their primary residence. Students’ technology access may change over time; however, the reporting instructions told districts to report based on the district’s assessment of a student’s status at some point during the month of March. This assessment in March was designed to be one-time only; once a district assessed a student’s status, no update was needed if the status changed later in the month.

The district only needed to report one applicable code for each student based on that snapshot assessment; however, if the district reported *multiple* program codes for an individual student, the Department’s calculations prioritize the minimum code number when placing the student in the correct bucket (i.e., if the district reports both 700212 *and* 700234, the appropriate code to use for the purposes of these calculations is 700212).

INTERNET CONNECTIVITY

Reporting Display

This data will be displayed as percentages at the school and district level for each of the reporting categories described below. Two tabs of information will be displayed on the report cards. The first tab will report the school or district overview, which will show aggregated data for all students in the school or district. On the second tab, readers will see the school or district data disaggregated by the federally required student groups.

Data Collection

Having access to internet connectivity at home was very important for students who had to take their education remotely or in a hybrid setting. In order to increase transparency on this issue, the U.S. Department of Education is requiring states to publish all available data on student access to technology devices and high-speed internet. This data must also be disaggregated by student subgroups as available.

The access to internet connectivity at home is generated using the Student Program (GQ) records. This data were reported during the End of Year Student Collection, which was open from May 6, 2021, to July 14, 2021. Community schools reported these data during the SOES End of Year Student Collection from January 4, 2021, to July 14, 2021.

The GQ record program codes indicate whether a student had internet connectivity at their primary residence. The level of internet connectivity for a student may change over time; however, the reporting instructions told districts to report based on the district’s assessment of a student’s status at some point during the month of

March. This assessment in March was designed to be one-time only; once a district has assessed a student's status, no update was needed if the status changes later in the month.

The following program code options were available to report students' connectivity access at home:

1. **700401** – District Provided Broadband: The student's school or district provides internet connectivity primarily through cable, DSL, or some other non-cellular access method for the student to use to complete schoolwork at their primary residence.
2. **700412** – Internet Via Broadband: The student has internet connectivity primarily through cable, DSL, or some other non-cellular access method for the student to use to complete schoolwork at their primary residence.
3. **700423** – District Provided Hotspot: The student's school or district provides internet connectivity primarily through cellular hotspot or cell phone for the student to use to complete schoolwork at their primary residence.
4. **700434** – Internet Via Hotspot: The student has internet connectivity primarily through cellular hotspot or cell phone for the student to use to complete schoolwork at their primary residence.
5. **700445** – No Regular Access to Internet: The student does not have regular internet connectivity for the student to use to complete schoolwork at their primary residence.
6. **700499** – Unknown Access to Internet: The student's internet connectivity for completing schoolwork at their primary residence is unknown.

The Organization-General Information (DN) record includes an attribute called **LEAPRVWIFI** which is reported if the district provides Wi-Fi access to students outside the building, such as from the school parking lot, or by parking a bus with a Wi-Fi hotspot in a student-accessible location.

For additional questions, please reach out to the Office of Accountability via email at Accountability@education.ohio.gov