

**2021-2022 School Year
Opportunity to Learn Data – Technical Documentation
Technology Hardware, Connectivity and Education Delivery Models
Traditional District and School Report Cards**

Introduction

Opportunity to learn refers to a student’s ready access to regularly offered educational opportunities—even in the most challenging of circumstances.

The data is intended to be for informational purposes only. The data helps to paint a picture of the students’ opportunity to learn and provides important context for student performance. If a district did not enter the status for a student into their Education Management Information System (EMIS) data set, then the student was counted as “unknown” in the displayed numbers.

Contents

Introduction	1
Education Delivery Model Data	2
Reporting Display	2
Data Collection	2
Reporting Business Rules	2
Technology Hardware	3
Reporting Display	3
Data Collection	3
Reporting Business Rules	4
Internet Connectivity	4
Reporting Display	4
Data Collection	4

**2021-2022 School Year
Opportunity to Learn Data – Technical Documentation
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Education Delivery Model Data

Education delivery models define the primary mode in which schools and districts delivered instruction to students in the most recent completed year. 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.

Reporting Display

Many districts changed their model across the year to adapt to ever-changing conditions. For this reason, the education delivery model data is reported on school and district report cards based on three distinct time periods:

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

Data Collection

The Primary Education Learning Model data is reported by districts in EMIS as part of the Organization General Information (DN) Record during the End of Year Student Collection.

Districts reported one of three options to describe the learning model being used by the school or district. The initial record described the model being used at the beginning of the year and each time the delivery model changed, the district added an additional record with a start date of the change and the new model being used.

The three 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., some students are in the building every day, but not all students, and students complete remote work on days they are not in the building)

Reporting Business Rules

In 2020-2021, Educational Service Centers (ESC) helped capture data on education delivery models and a combination of both sources (EMIS and ESC Survey data) were used for the report cards. The ESCs did not continue with their collection in subsequent years and thus for later report cards, only EMIS data were included in the report.

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 entire 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

2021-2022 School Year Opportunity to Learn Data – Technical Documentation Technology Hardware, Connectivity and Education Delivery Models Traditional District and School Report Cards

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. If no DN records were reported for any dates in a range, the data were deemed to be “unknown” for that range.

Technology Hardware

This data shows students' access to technology at home

Reporting Display

This data is displayed as percentages at the school and district level for each of the hardware reporting categories. These percentages are shown as both an aggregate for all students in a building or district, and they are also displayed disaggregated into federal student groups.

Data Collection

This data is generated using a combination of Organization-General Information (DN) records and Student Program (GQ) records that are reported during the End of Year Student Collection. Community schools report this data during the SOES End of Year Student Collection.

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

- **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.
- **700212 – Student Access to Computer:** The student had 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.
- **700234 – Student Access to Smartphone:** The student had regular access to a smartphone for the student to use to complete schoolwork at their primary residence.
- **700245 – No Regular Access to Hardware:** The student did not have regular access to a desktop, laptop, tablet, or smartphone for the student to use to complete schoolwork at their primary residence.
- **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 was unknown.

The Organization-General Information (DN) record included an attribute called LEAPRVHARD, which was reported if the district provided 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.

2021-2022 School Year Opportunity to Learn Data – Technical Documentation Technology Hardware, Connectivity and Education Delivery Models Traditional District and School Report Cards

Reporting Business Rules

Calculations for Technology Access at Home first used 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, and this information was reported in the DN record, the students were added to the bucket called “District Provided Computer.”

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

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

In cases where a district did not submit the DN record to report that all students in a grade or grade range received hardware, the calculation used 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 were for districts to report based on the students’ 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 prioritized the minimum code number** when placing the student in the correct bucket (i.e., if the district reports both 700212 and 700234, the code placed the student in the bucket for 700212).

Internet Connectivity

This data explains students' access to internet at home

Reporting Display

This data is displayed as percentages at the school and district level for each of the connectivity categories. These percentages are shown both as an aggregate for all students in a building or district, and they also are disaggregated into federal student groups.

Data Collection

This data is generated using the Student Program (GQ) records that are reported during the End of Year Student Collection. Community schools report these data during the SOES End of Year Student Collection. The GQ record program codes indicate whether a student had internet connectivity at their primary residence.

2021-2022 School Year
Opportunity to Learn Data – Technical Documentation
Technology Hardware, Connectivity and Education Delivery Models
Traditional District and School Report Cards

The level of internet connectivity for a student may change over time; however, the reporting instructions were for districts to report based on the students' 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 following program code options were available to report students' connectivity access at home:

- **700401 – District Provided Broadband:** The student's school or district provided 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.
- **700412 – Internet Via Broadband:** The student had internet connectivity primarily through cable, DSL, or some other non-cellular access method for the student to use to complete schoolwork at the primary residence.
- **700423 – District Provided Hotspot:** The student's school or district provided internet connectivity primarily through cellular hotspot or cell phone for the student to use to complete schoolwork at the primary residence.
- **700434 – Internet Via Hotspot:** The student had internet connectivity primarily through cellular hotspot or cell phone for the student to use to complete schoolwork at the primary residence.
- **700445 – No Regular Access to Internet:** The student did not have regular internet connectivity to use to complete schoolwork at the primary residence.
- **700499 – Unknown Access to Internet:** The student's internet connectivity for completing schoolwork at the primary residence was unknown.

Students were placed in the six "buckets" shown above based **ONLY** on the student program codes on connectivity. The Organization-General Information (DN) record includes a separate 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. This data will be reported as a separate element on the report cards to show whether "YES" the district or school did provide Wi-Fi access or "NO" the district did not provide access. This element is **NOT** used to place students in the bucket showing the district provided broadband or a hotspot in the list above.