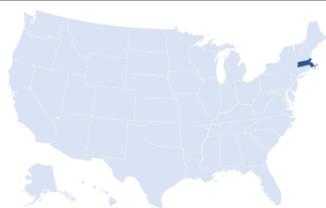




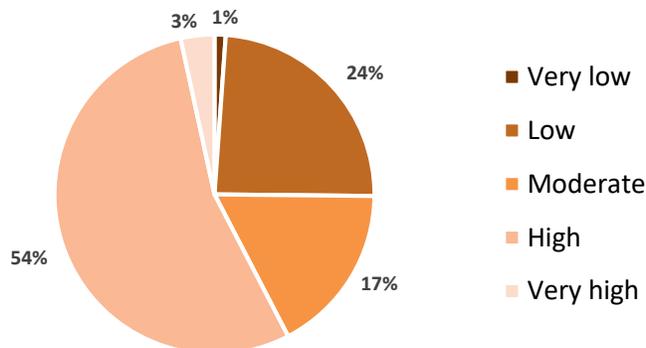
Pandemic Schooling Mode and Assessment Outcomes Data Series



MASSACHUSETTS

State Snapshot

LEVEL OF ACCESS TO IN-PERSON INSTRUCTION, 2020-21



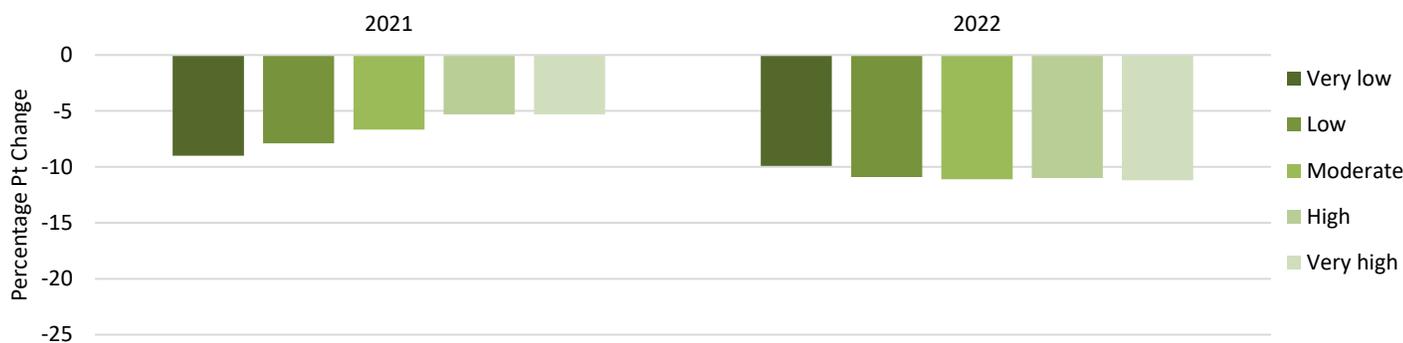
Note. Massachusetts students were classified according to their level of access to in-person instruction in 2020-21, based on their district's learning model categorizations over the course of the year (in-person, hybrid, virtual). Of 846,201 students in K-12 included in the analysis, 3% had *very high* levels of access to in-person instruction ($n=28,791$), 54% had *high* access ($n=458,788$), 17% had *moderate* access ($n=145,721$), 24% had *low* access ($n=203,342$) and 1% had *very low* access ($n=9,559$).

HIGHLIGHTS

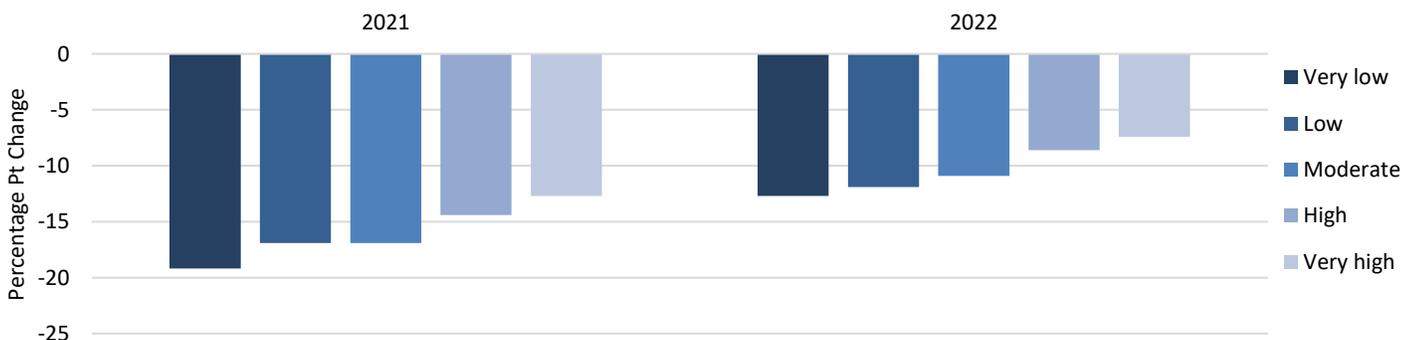
- **Level of In-Person Access:** In 2020-21, **3%** of Massachusetts students were in districts that offered *very high* levels of in-person instruction. Approximately **1%** of students had *very low* access to full in-person instruction.
- **Average Changes in Academic Proficiency:** Relative to Spring 2019, the number of Massachusetts students achieving **ELA** and **math** proficiency was **10.8** percentage points lower in 2021. The number of students reaching **ELA** and **math** proficiency in 2022 was **10.4** percentage points lower than in 2019, on average.
- **Changes in Academic Proficiency by Level of Access to In-Person Instruction:** Students in districts with *very low* levels of in-person instruction experienced the greatest declines in **math** proficiency in both Spring 2021 and 2022, relative to Spring 2019.

MASSACHUSETTS AVERAGE CHANGE IN ACADEMIC PROFICIENCY

Change in Percentage of Students in Grades 3–8 Achieving **ELA** Proficiency Compared to Spring 2019, by Level of Access to Full In-Person Instruction in 2020-21



Change in Percentage of Students in Grades 3–8 Achieving **Math** Proficiency Compared to Spring 2019, by Level of Access to Full In-Person Instruction in 2020-21



Note. As displayed in the pie chart above, the distribution of students across categorizations varies.

PANDEMIC SCHOOLING MODE DATA



Pandemic schooling mode data for Massachusetts during the 2020–21 school year were provided by the Massachusetts Department Elementary and Secondary Education. Data are available at the district level between October 2020–May 2021. For more information and to access the data, visit <https://www.covidschooldatahub.com/states/massachusetts>.

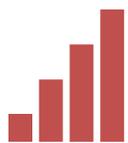
To determine the *level of access to in-person instruction* in 2020-21, the COVID-19 School Data Hub (CSDH) first determined the percentage of the school year that students within each district were offered full in-person instruction, hybrid instruction, or virtual instruction. Note that the data reflect the *predominant* model used by a school or district during a given time period. Also, students may have opted for virtual learning even if their school's predominant learning model was in-person or hybrid.

Next, for the purposes of this Data Series, districts were classified into **five levels of access to in-person instruction**, based on the following formula:

$$\% \text{ of the year in-person} * 100 + \% \text{ of the year hybrid} * 50 + \% \text{ of the year virtual} * 0$$

Scores and level of in-person access classifications:

Score:	0-20	>20-40	>40-60	>60-80	>80-100
Classification:	Very low	Low	Moderate	High	Very high



STATE ASSESSMENT DATA

The student outcome data used in this Data Brief come from the Massachusetts Comprehensive Assessment System (MCAS) Next-Generation assessment. The data represent outcomes for students in Grades 3–8 in math and ELA.

Measuring Proficiency

The MCAS assessment includes four proficiency levels: *Not Meeting Expectations*, *Partially Meeting Expectations*, *Meeting Expectations*, and *Exceeding Expectations*. In this report, “**not proficient**” = *Not Meeting/Partially Meeting Expectations*, and “**proficient**” = *Meeting/Exceeding Expectations*.

Years Included in Analysis

This report reflects school years (SY) 2018-19 through 2021-22. Data for SY 2019-20 are not available, as the assessment was not administered due to the COVID-19 pandemic.

Participation Rate Data

In Spring 2021, the U.S. Department of Education waived the requirement that 95% of all students complete the state's annual academic assessment, leading to varied participation rates by state. In Massachusetts, approximately 95% of students participated in the state assessment in 2021. In Spring 2022, districts were again required to measure the achievement of not less than 95% of all students and students in each subgroup on its annual statewide assessments in ELA and math.

Additional Information

In 2021, testing time for MA students in Grades 3–8 was reduced to accommodate schools' new learning schedules. To reduce testing time, students only took half of a regular assessment in each subject area (either Session 1 or Session 2). Students learning remotely had the option to test remotely as well. More information about the MCAS can be found at <https://www.doe.mass.edu/mcas/default.html>.



ABOUT THE DATA SERIES

The Pandemic Schooling Mode and Assessment Outcomes Data Series explores how differences in schooling mode (in-person, hybrid, or virtual) during the first full pandemic school year of 2020–21 relate to changes in student academic outcomes.

Specifically, the Data Series presents changes in math and ELA proficiency on state assessments in Spring 2021 and Spring 2022, relative to Spring 2019, by level of access to full in-person instruction in the 2020-21 school year.

For additional Data Briefs available through this Data Series, please visit <https://www.covidschooldatahub.com>. For any questions, please email covid19schooldatahub@gmail.com.

The COVID-19 School Data Hub (CSDH) integrates data provided from state agencies about the learning models of instruction (in-person, hybrid, or virtual) used in their public K-12 schools and districts over the course of the 2020-21 school year. This public database provides a valuable resource for researchers who are seeking to explore a variety of outcomes based on students' modes of learning during the first full school year of the COVID-19 pandemic. School- and district-level data files are publicly accessible at <https://www.covidschooldatahub.com>.

Suggested Citation: COVID-19 School Data Hub. (2022). *Massachusetts state snapshot: Pandemic schooling mode and assessment outcomes data series*. Data Brief 2022-15-MA-01. Providence, RI: COVID-19 School Data Hub.

<https://www.covidschooldatahub.com/> | twitter: @CSDH19