## Pandemic Learning: Technical Materials for Teacher Survey and Discussion Groups with Public K-12 School Principals, Teachers, and Parents

This product is a supplement to Pandemic Learning: As Students Struggled to Learn, Teachers Reported Few Strategies as Particularly Helpful to Mitigate Learning Loss (GAO-22-104487), the first in a series of three reports on pandemic learning issuing in spring 2022.

## Background

This electronic supplement serves as a companion to GAO-22-104487, Pandemic Learning: As Students Struggled to Learn, Teachers Reported Few Strategies as Particularly Helpful to Mitigate Learning Loss, as well as two forthcoming reports on pandemic learning. This supplement presents technical information about our two methodologies-a nationwide survey of K-12 public school teachers and discussion groups with educators and parents-as well as a reproduction of the survey instrument and survey results in aggregate form.

Our survey asked teachers about instructional models, adult support provided to students learning in a virtual environment, difficulties students faced when learning, their students' academic progress, strategies used to mitigate learning loss, students who never showed up for class, and students who became disengaged, among other topics. GAO contracted with Gallup to conduct a nationally representative survey of elementary and secondary public school teachers between June 18 and July 9, 2021.

To gain further insights about the topics covered in the survey and to get the perspective of other K-12 stakeholders, we held 18 virtual discussion groups with public school teachers (six groups), parents of students (six groups), and principals (six groups) between June 29 and July 14, 2021. We also held one discussion group with teachers at Department of Defense Education Activity (DODEA) schools on July 19, 2021 and one with DODEA parents on July 21, 2021. DODEA teachers participated in discussion groups only; no DODEA teachers completed the teacher survey.

Technical details of our survey and discussion group methodologies are linked below. Also linked below is a reproduction of the web-based survey with questions and aggregate results. We did not include respondent narrative answers that were provided to open-ended questions.

We conducted the work upon which this supplement is based in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

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## Technical Description of K-12 Public School Teacher Survey

We conducted a nationally representative survey of K-12 public school teachers to obtain their perspectives about learning loss and strategies to mitigate it during the pandemic. We designed the survey questions and contracted with Gallup to conduct a nationally representative survey of elementary and secondary public school teachers between June 18 and July 9, 2021. We obtained generalizable survey responses from 2,862 general education teachers. The initial sample was selected from the Gallup Panel, a probability-based panel of U.S. adults, and a national list of teachers.

## Survey Design

We designed a survey of K-12 public school teachers as part of our body of work to understand how COVID-19 has affected public K-12 education. The survey asked teachers about their instructional models, adult support provided to their students, difficulties their students faced, their students' academic progress, strategies they used to mitigate learning loss, and the extent to which their students were engaged in learning, among other topics. We wrote 41 questions on these topics and asked respondents to reflect on the 2020-21 school year. To avoid having respondents guess at answers, we pre-tested the survey to identify which questions needed "not applicable" or "don't know" response options.

The survey defined several terms, including:

- This school year: answer questions that refer to 'this school year' by considering your experiences during the 2020-2021 school year.
- Typical school year: answer questions that refer to a 'typical school year' by considering your experiences during a recent school year prior to the pandemic.
- Your students: answer each question based on your experiences with, and observations of, the students whom you teach at least one subject.
- English Learners: English Learners (EL) are students who your school has identified as learning English. Your school may refer to these students as English language learners.
- Learning loss: Learning loss is the extent to which a student is behind where they would be at the same point in a typical school year.
- Unaccounted for: Students who were registered to be in your class(es) but who did not attend all year. These students are sometimes referred to as "no shows."
- Disengaged: Students whose limited participation in your class(es) greatly affected their learning or grades. Examples of limited participation include:
- logging in but not participating,
- attending class but not completing or turning in work, or
- missing a substantial number of classes.

We asked teachers to identify which of the following four models they taught in for the majority of the 2020-21 school year: ${ }^{1}$

- Full-time in-person learning - all or almost all students attended in person full-time.
- Full-time virtual learning - all or almost all students attended virtually full-time.
- Hybrid learning - students alternated between attending some days in person and other days virtually.
- A mix of learning - some students generally attended in person full-time and other students generally attended virtually full-time.

We then asked those teachers whose students were virtual, in person, or hybrid for the majority of the year to consider their experiences teaching students in their respective models for many of the questions, rather than to aggregate their experiences teaching across any of the models they used during the 2020-21 school year. We randomly assigned teachers whose students were in a mixed model to respond based on their in-person or virtual students. We asked teachers to consider experiences teaching in specific models to reduce the length of the survey session and the burden on respondents.

We pretested the survey with 10 teachers to evaluate their understanding of the terms used and the intent of questions, the ease and time required to complete the survey, and their feedback on additional topics to include. Gallup also conducted a pilot test prior to data collection and obtained 10 completed web interviews to evaluate respondent comprehension, item relevance to the sampled population, the extent to which it was feasible for respondents to answer a survey question and the steps required to select a response, and any possible issues with the visual design or survey navigation. We incorporated feedback from the pretests and pilot tests prior to fielding the survey.

## Sample Design

The survey was designed to make generalizable estimates for the population of general education teachers at public elementary and secondary schools and who taught a core subject. For the purpose of this survey, core subjects included: elementary school, math, science, computer science/information technology, English/language arts/reading/writing, social studies and world/foreign languages or English language learning. Gallup drew the sample from two population frames: (1) its Gallup Panel, a probability-based panel of people who agree to participate in surveys on various topics and (2) The Dun and Bradstreet listed frame of U.S. educators, which supplemented the Gallup Panel sample with people known to work as teachers. The probability sample was designed to achieve margin of error targets for key subgroups by location, participation in free or reduced-price lunch programs, grade level, and percentage of English learners (see table 1).

[^0]Table 1: Subpopulation by Margin of Error (MOE) requirement and Minimum Sample Size

|  | MOE requirement | Minimum required sample size | Number of surveys completed |
| :---: | :---: | :---: | :---: |
| Location |  |  |  |
| Rural/Town | +/-7\% | 400 | 768 |
| Suburban | +/-7\% | 400 | 1,061 |
| Urban | +/-7\% | 400 | 990 |
| \% Eligible for free or reduced-price lunch (FRPL) |  |  |  |
| Low (<=20\%) | +/-7\% | 400 | 558 |
| Mid-Range (21-80\%) | +/-7\% | 400 | 1,305 |
| High (81-100\%) | +/-7\% | 400 | 757 |
| Grade Level |  |  |  |
| K-2 | +/-10\% | 200 | 254 |
| 3-8 | +/-10\% | 200 | 1,536 |
| 9-12 | +/-10\% | 200 | 1,323 |
| English Learners (EL) |  |  |  |
| 25\% or more are EL | +/-10\% | 200 | 525 |
| Less than 25\% are EL | +/-10\% | 200 | 2,336 |

[^1]Note: The number of completed surveys provided margins of errors that met or exceeded all of the requirements.

The Gallup Panel is a panel of people selected with probability-based methods to represent the population of adults in the United States. Established in 2004, the Gallup Panel consists of more than 110,000 members who have agreed to complete surveys regularly. Its sampling frames cover more than 95 percent of the U.S. adult population, including approximately 2,700 K-12 teachers. Gallup recruits members using address-based sampling and random-digit-dial telephone sampling procedures for both landline and cell phones. Random recruitment allows calculation of selection probabilities, and Gallup Panel members are required to provide demographic data (date of birth, gender, education level, race/ethnicity, and ZIP code) that can be used to carry out post-stratification adjustments that ensure the sample represents selected population characteristics. The design allows Gallup to calculate selection probability and response rates so that results can be projected to the target population with known levels of precision.

Gallup specifically collects teacher status from all panel members and regularly updates this demographic in the panel member database to maintain a subpanel of teachers. Gallup uses a tightly controlled process for inviting panel members to participate in research, ensuring that respondents are not professional panelists. Members are invited to no more than two to three surveys per month. While Gallup regularly conducts surveys of teachers, Gallup ensures that no individual teacher in its panel takes more than four teacher-specific surveys annually. This keeps teachers from being overburdened and taking multiple teacher surveys concurrently.

Gallup supplemented the Gallup Panel sample with teachers sampled from a quasi-probability listed frame of 42,938 teachers because the number of teachers in Gallup panel was not sufficient to achieve targeted precision levels. This comprehensive database of U.S. educators
is maintained by an established list provider and includes email addresses. The list is regularly updated and audited, has more than 5 million K-12 personnel in the U.S., and includes educators from more than 13,000 districts. Gallup thoroughly vetted many sample sources for comprehensiveness and quality and has worked with this list source for nearly 10 years for projects that require larger sample sizes than what can be achieved with the Gallup Panel alone.

## Survey Administration

We contracted with Gallup to administer our survey. Gallup fielded the web survey between June 18 and July 9, 2021. Gallup began inviting potential respondents on June 18, 2021. Nonresponders received email reminders on June 21, June 24, June 26, June 28, July 1, July 3, July 5, and July 8.

A total of 2,862 eligible teachers completed the survey from an initial sample of 45,792 teachers (see table 2). The average response time was 26 minutes and 25 seconds, excluding outliers. The survey achieved an overall weighted cumulative response rate of 8.2 percent when adjusted for estimated eligibility of 76.6 percent. ${ }^{2}$ The Gallup Panel sample had a response rate of 49.6 percent and the listed sample had a 5.4 percent response rate. For further details on the reliability of estimates produced using this survey, see these two sections below: 1) sample weighting and 2 ) survey exclusions, quality, and error.

Table 2: Response Outcomes of Nationally Representative Survey of K-12 Public School Teachers Administered by Gallup

|  |  | Gallup panel | Listed sample | Total sample |
| :--- | :--- | ---: | ---: | ---: |
| 1 | Total sampled cases | 2,886 | 42,938 | $\mathbf{4 5 , 7 9 2}$ |
| 2 | Completed survey (weighted cases) | 803 | $\mathbf{2 , 8 6 2}$ |  |
| 3 | Ineligible | 705 | $\mathbf{2 , 0 5 9}$ | $\mathbf{1 0 1 6}$ |
| 4 | Partial complete | 96 | $\mathbf{4 7 2}$ | $\mathbf{4 7 2}$ |
| 5 | Attempted survey (2+3+4) | 1,604 | $\mathbf{4 , 3 5 0}$ |  |
| 6 | Unknown (1-5) | 1,282 | $\mathbf{4 1 , 4 4 2}$ |  |
| 7 | Eligibility rate ((2+4)/5) | $56 \%$ | $\mathbf{4 0 , 1 9 2}$ | $\mathbf{7 7 \%}$ |
| 8 | Estimated eligible unknowns $\left(6^{*} 7\right)$ | 719 | $89 \%$ | $\mathbf{3 1 , 7 6 3}$ |
| 9 | Total eligible sample (2+4+8) | $\mathbf{1 , 6 1 8}$ | $\mathbf{3 5 , 6 4 0}$ | $\mathbf{3 5 , 0 9 7}$ |

Source: Gallup | GAO-22-105817

Note: The American Association for Public Opinion Research's response rate 3 (unknown eligibility) was used to calculate the estimated number of eligible respondents.

## Sample Weighting

Gallup adjusted the survey weights to account for potential nonresponse biases by accounting for relevant school characteristics for non-respondents and re-weighting (post-stratifying) the sample to match the number and regional distribution of teachers and teacher demographics. More specifically, the base weights for both samples were set to one because samples were

[^2]selected with equal probability from both sources. The responses were weighted to minimize bias independently for each source and for the sources combined. Responses from each source were first weighted for non-response by region. Gallup then used post-stratification weighting adjustments to adjust the sample to match national demographics of teacher age, sex, race, and school characteristics such as school location (urban, suburban, rural). Data from the National Center for Education Statistics National Teacher and Principal Survey for 2017-2018 were used as targets for post-stratification weighting. Last, the final weights were calculated by combining the weights of the completed surveys from both samples using composite weighting procedures and trimming to minimize the effect of extreme weights on variance of estimates. Variances were adjusted for a calculated design effect of 2.03.

## Survey Exclusions, Quality, and Error

Based on the survey and weighting adjustment methods described above, we determined that estimates from this survey are generalizable to the population of K-12 public school teachers, and are sufficiently reliable for the purposes of our report.

All estimates in this report have a margin of error less than or equal to $+/-10$ percent at the 95 percent confidence level. Margins of error for subpopulations of interest ranged from 2.9 percent (teachers in schools with less than 25 percent ELL, the subpopulation with the largest sample size) to 7.2 percent for teachers of K-2 students (the subpopulation with the smallest sample size; see table 3). Margins of error for individual questions varied depending on the number of responses. All reported margins of error include the computed design effects in the weighting.

The quality of the two sample frames and the information used to address non-sampling errors are important contributors to the quality of survey results. The Gallup Panel is a probabilitybased panel that is representative of adults in the U.S. The Dun and Bradstreet list of teachers does not cover all teachers and may under-represent teachers in small rural schools. However, this under-coverage is small relative to the population of teachers and is unlikely to bias national population estimates. Methodologies used to minimize and address non-response are also important contributors to the quality of results. This survey's focus on a narrow topicteacher experiences related to COVID-19 during the 2020-21 school year-is beneficial for nonresponse bias adjustments with covariates that are correlated to the key outcome variables. The covariates used for non-response bias adjustments (teacher age, gender, race, and location) are collected from Panel members The data used to adjust the responses to the target population are provided from a survey of the target population that was high quality in terms of sample frame, coverage, design, and analysis. The most recently available data from the National Center for Education Statistics National Survey of Teachers and Principals were used to perform post-stratification. However, as with all non-probability adjustment methods, the inferences made from these data require reliance on modeling assumptions.

Table 3: Margin of Error Calculation for Subpopulation Estimates from a Nationally Representative Survey of K-12 Public School Teachers Administered by Gallup

|  | Sample size | Margin of error |
| :--- | ---: | ---: |
| Location |  |  |
| Rural/town | 768 | $4.9 \%$ |
| Suburban | 1,061 | $4.3 \%$ |
| Urban | 990 | $4.5 \%$ |


|  | Sample size | Margin of error |
| :--- | ---: | ---: |
| Percent eligible for free or reduced-price lunch |  |  |
| Low (0-20\% eligible) | 558 | $5.8 \%$ |
| Mid-range (21-80\% eligible) | 1,305 | $3.9 \%$ |
| High (81-100\% eligible) | 757 | $4.9 \%$ |
| Grade level (teacher) | 254 | $7.2 \%$ |
| K - 2 | 1,536 | $3.5 \%$ |
| $3-8$ | 1,323 | $3.3 \%$ |
| $9-12$ |  |  |
| Percent English learners (EL) | 2,336 | $2.9 \%$ |
| Less than $25 \%$ EL | 525 | $5.9 \%$ |
| $25 \%$ or more EL |  |  |

Source: Gallup. | GAO-22-105817

## Analysis of Survey Data

We began by analyzing the aggregate responses for all 2,862 teachers who completed the survey. Their responses are generalizable to the population of all general education public school teachers in the U.S.

We then disaggregated responses by

- Locale, as defined by teachers' reports of whether they lived in
- a rural area or small town
- suburb, or
- urban area
- Percentage of their students who participated in the free or reduced-price lunch (FRPL) program, as reported by the teacher
- High-poverty: teachers reported 81-100 percent of their students participated in FRPL
- Mid-poverty: teachers reported 21-80 percent of their students participated in FRPL
- Low-poverty: teachers reported 0-20 percent of their students participated in FRPL
- Percentage of a teacher's students were English learners, as reported by the teacher
- Low: less than 20 percent of a teacher's students were English learners ${ }^{3}$
- High: 20 percent or more of a teacher's students were English learners
- Grade level, as reported by the teacher ${ }^{4}$
- Grades K-2 ${ }^{5}$
- Grades 3-8
- Grades 9-12
- Instructional model
- Virtual: teachers who reported their students spent the majority of the year in a virtual environment
- Hybrid: teachers who reported their students spent the majority of the year in a hybrid environment
- In person: teachers who reported their students spent the majority of the year in person.


## Odds Ratio Analysis

Odds ratios are a measure of association between two variables. They approximate how much more likely or unlikely (in terms of odds) it is for the outcome to be present among subjects in populations that differ by a characteristic. For example, K-5 teachers in a virtual environment with high-poverty students had an odds ratio of 4.3 in response to a question about students lacking a school meal compared to a typical year. In other words, these teachers were 4.3 times more likely than all other K-5 teachers to report that their students lacked a school meal in 202021 compared to a typical pre-pandemic year. Odds ratios assume the responses are not correlated, and the interpretation is dependent on model specification. We did not control for multiple effects, and results could differ if we had included multiple effects in our models. ${ }^{6}$ We took statistical uncertainty into account when drawing conclusions from the results.

[^3]
## Regression Modeling

We developed a series of statistical models to describe the associations between teachers' use of various strategies to address learning loss and their perceived effectiveness.

Our survey asked two closed-response questions about learning loss strategies. We reproduce the question wording and response options in the survey results section of this supplement. The first question was:

Q29: Approximately, how often during this school year have you used the following strategies to support learning or address learning loss?
(Learning loss is the extent to which a student is behind where they would be at the same point in a typical school year.)

For each strategy that a teacher reported using, we then asked:
Q30: How many of your students improved their academic progress as a result of each of the following strategies?

Our models estimated the probability that a teacher would report that "about half" or more of their students "improved their academic progress" varied across instructional models. ${ }^{7}$ We grouped responses to each question, in order to increase the sample sizes. We estimated these probabilities separately by grade level, in-person or hybrid and virtual instructional models, and a three-way categorization of the school's free or reduced-price lunch (FRPL) participation. ${ }^{8}$ We limited the survey respondents to those who had observed values on all variables-a subsample that could vary across learning strategies.

Specifically, we estimated the following logistic regression model:

$$
\mathrm{E}\left(Y_{i} \mid x_{i}, \beta\right)=\frac{\exp \left(x_{i} \beta\right)}{1+\exp \left(x_{i} \beta\right)}
$$

$Y_{i}$ is a binary random variable that indicated whether teacher $i$ said that a strategy helped "about half" or more of their students; $x_{i}$ was a vector of fixed, discrete covariates measuring instructional model, grade level, and FRPL participation, as described above; and $\beta$ was a vector of coefficients. We estimated each model among respondents who said they used the strategy.

We applied the final survey weights to estimate the coefficients, in order to compensate for possible bias from sample selection, non-response, and other sources of error, as described

[^4]above. However, we did not use complex sample variance estimators to estimate the uncertainty of the parameters. Instead, we applied "robust" variance estimators for the logistic model under simple random sampling that were consistent with arbitrary patterns of heteroskedasticity. This is appropriate for a "structural" modeling application, where we assume the outcome to vary randomly conditional on fixed covariates. This contrasts with typical survey analysis variance estimators, which assume the data are fixed and estimator variance occurs through random sample selection. ${ }^{9}$

We summarized the fitted model by using the parameters to estimate the mean predicted probability of perceived improvement across teachers, conditional on grade level and instructional model and averaging over sample values of FRPL participation. We estimated 95 percent confidence intervals for this derived quantity using the Delta Method and Normal approximations, as implemented in Stata 17. Overall samples sizes of about 2,800 teachers satisfied the large sample assumptions required for robust variance estimation methods of the parameters and the derived quantities.

[^5]K-12 Public School
Teachers Survey: Survey Questions

## and Results

## Introduction

Teacher Survey on Pandemic Learning

The survey takes approximately 20 minutes to complete and will provide the U.S. Congress with important information about students' learning during the pandemic. You have been selected from among thousands of teachers nationally to complete this survey.

This survey is sponsored by the U.S. Government Accountability Office (GAO). GAO is an independent, nonpartisan research agency of the U.S. Congress. This survey is intended to provide information for federal policymakers. It will be used to provide Congress information on national trends related to:

- students' school day settings,
- student learning during the pandemic,
- strategies for supporting learning and addressing learning loss during the pandemic, and
- disconnected students.

This survey is not a review of schools or school districts or whether they are meeting legal or educational requirements.

S1 According to Gallup's records, you work as a K-12 teacher. Did you teach in a public, K-12 school during the 2020-2021 school year?

| Response | Estimated number of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (number) | 95 percent confidence <br> interval - upper bound <br> (number) |
| :--- | ---: | ---: | ---: |
| Yes | $2,350,753$ | $2,263,273$ | $2,438,233$ |

Q1 How many total years of K-12 teaching experience do you have?

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Less than 1 year | 0 | 0 | 1 |
| 1 year | 3 | 2 | 4 |
| $2-3$ years | 7 | 5 | 8 |
| $4-6$ years | 14 | 12 | 16 |
| $7-9$ years | 12 | 10 | 14 |
| 10 or more years | 65 | 62 | 67 |

Q2 Which grade level(s) did you teach during the 2020-2021 school year? Select all that apply.

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Kindergarten | 8 | 7 | 10 |
| 1st grade | 12 | 10 | 14 |
| 2nd grade | 12 | 10 | 14 |
| 3rd grade | 15 | 13 | 17 |
| 4th grade | 16 | 14 | 19 |
| 5th grade | 21 | 19 | 24 |
| 6th grade | 12 | 11 | 13 |
| 7th grade | 16 | 14 | 18 |
| 8th grade | 15 | 13 | 16 |
| 9th grade | 18 | 17 | 20 |
| 10th grade | 20 | 19 | 22 |
| 11th grade | 23 | 21 | 25 |
| 12th grade | 22 | 20 | 24 |

Q3 What subject(s) did you teach during the 2020-2021 school year? Select all that apply.

| Response | Estimated percentage of teachers | 95 percent confidence interval - lower bound (percentage) | 95 percent confidence interval - upper bound (percentage) |
| :---: | :---: | :---: | :---: |
| General education, such as elementary education | 24 | 21 | 26 |
| Math | 28 | 25 | 30 |
| Science (e.g., biology, engineering) | 23 | 21 | 25 |
| Computer science/information technology | 4 | 3 | 5 |
| English/language arts/reading/writing | 34 | 32 | 37 |
| Social studies (e.g., history, psychology, economics) | 23 | 21 | 25 |
| World/Foreign languages | 2 | 1 | 2 |
| English language learning | 7 | 6 | 9 |
| Special education | 4 | 3 | 5 |
| P.E./Health | 1 | 1 | 2 |
| Music, Visual or Performing Arts | 1 | 1 | 2 |
| Technical or vocational (e.g., industrial arts, family and consumer science) | 1 | 1 | 2 |
| Substitute teacher | 2 | 1 | 2 |
| Other | 3 | 2 | 4 |

Q4 Over the current school year, to how many students, in total, have you taught these subjects?

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| 60 or fewer | 41 | 38 | 44 |
| 61 to 100 | 23 | 21 | 25 |
| 101 to 150 | 23 | 21 | 24 |
| More than 150 | 13 | 12 | 15 |

Note: In our survey, teachers answered the question with a number of students. We grouped the responses into these four categories.

Q5 Approximately how many of these students are English Learners (EL)?
(English Learners (EL) are students who your school has identified as learning English. Your school may refer to these students as English language learners.)

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| 5 or fewer | 54 | 51 | 56 |
| 6 to 10 | 15 | 13 | 17 |
| 11 to 20 | 12 | 11 | 14 |
| More than 20 | 20 | 18 | 22 |

Note: In our survey, teachers answered the question with a number of students. We grouped the responses into these four categories.

Q5A Which of the following best describes the district in which you taught during the 2020-2021 school year?

|  | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Response | 97 | 96 | 98 |
| I taught in the same school <br> district as I did during the 2019- |  |  |  |
| I taught in a different school <br> district than the 2019-2020 <br> school year | 3 | 2 | 4 |

Q5B Which of the following best describes the grade level you taught during the 2020-2021 school year?

|  | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| I taught the same grade as I did <br> during the 2019-2020 school <br> year | 85 | 83 | 87 |
| I taught a different grade during <br> the 2019-2020 school year | 15 | 13 | 17 |

## Q6_T

## Students' School Day Settings

First, we have some questions about your experiences teaching during the 2020-2021 school year. If you teach at more than one school, for the rest of the survey, please think about the school with which you spent the most time this school year.

Please consider the students for whom you taught the subjects you selected earlier in the survey.

Q7 Which of the following best describes the learning situation of your students at the beginning of the 2020-2021 school year?
(Do not include any time that individual or small groups of students attended virtually in order to quarantine or isolate.)

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Full-time in-person learning - all <br> or almost all students attended in <br> person full-time. | 15 | 13 | 17 |
| Full-time virtual learning - all or <br> almost all students attended <br> virtually full-time. | 48 | 46 | 51 |
| Hybrid learning - students <br> alternated between attending <br> some days in person and other <br> days virtually. | 15 | 14 | 17 |
| A mix of learning - some <br> students generally attended in <br> person full-time and other <br> students generally attended <br> virtually full-time. | 22 | 19 | 24 |

Q8 Which of the following best describes the learning situation of your students at the end of the 2020-2021 school year?
(Do not include any time that individual or small groups of students attended virtually in order to quarantine or isolate.)

|  | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Full-time in-person learning - all <br> or almost all students attending <br> in person full-time. | 35 | 33 | 38 |
| Full-time virtual learning - all or <br> almost all students attending <br> virtually full-time. | 10 | 8 | 11 |
| Hybrid learning - students <br> alternating between attending <br> some days in person and other <br> days virtually. | 12 | 11 | 14 |
| A mix of learning - some <br> students generally attending in <br> person full-time and other <br> students generally attending <br> virtually full-time. | 43 | 41 | 46 |

Q9 Which of the following best describes the learning situation of your students for the majority of the 2020-2021 school year?
(Do not include any time that individual or small groups of students attended virtually in order to quarantine or isolate.)

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Full-time in-person learning - all <br> or almost all students attended in <br> person full-time. | 25 | 22 | 27 |
| Full-time virtual learning - all or <br> almost all students attended <br> virtually full-time. | 28 | 26 | 31 |
| Hybrid learning - students <br> alternated between attending <br> some days in person and other <br> days virtually. | 20 | 18 |  |
| A mix of learning - some <br> students generally attended in <br> person full-time and other <br> students generally attended <br> virtually full-time. |  | 26 |  |

Q10A For how many months during the 2020-2021 school year did you teach students in full-time in-person learning - all or almost all students attending in person full-time.
(Do not include any time that individual or small groups of students attended virtually in order to quarantine or isolate.)

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| 0 | 1 | 0 | 3 |
| 1 | 0 | 0 | 1 |
| 2 | 0 | 0 | 1 |
| 3 | 1 | 0 | 2 |
| 4 | 2 | 1 | 4 |
| 5 | 4 | 2 | 7 |
| 6 | 5 | 3 | 8 |
| 7 | 8 | 6 | 12 |
| 8 | 13 | 10 | 18 |
| 9 | 32 | 27 | 38 |
| 10 | 32 | 27 | 38 |
| 11 | 0 | 0 | 1 |
| 12 | 1 | 0 | 3 |

Q10B For how many months during the 2020-2021 school year did you teach students in full-time virtual learning - all or almost all students attending virtually full-time.
(Do not include any time that individual or small groups of students attended virtually in order to quarantine or isolate.)

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| 0 | 0 | 0 | 1 |
| 1 | 1 | 0 | 3 |
| 2 | 0 | 0 | 1 |
| 3 | 1 | 0 | 3 |
| 4 | 1 | 1 | 3 |
| 5 | 5 | 3 | 7 |
| 6 | 13 | 10 | 17 |
| 7 | 24 | 20 | 28 |
| 8 | 16 | 13 | 19 |
| 9 | 12 | 9 | 16 |
| 10 | 24 | 20 | 29 |


|  | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: | ---: |
| 11 | 1 |  |  |
| 12 | 2 | 0 | 1 |

Q10C For how many months during the 2020-2021 school year did you teach students in hybrid learning - students alternating between attending some days in person and other days virtually.
(Do not include any time that individual or small groups of students attended virtually in order to quarantine or isolate.)

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| 0 | 1 | 0 | 3 |
| 1 | 1 | 0 | 1 |
| 2 | 2 | 1 | 5 |
| 3 | 8 | 6 | 13 |
| 4 | 16 | 12 | 21 |
| 5 | 16 | 12 | 20 |
| 6 | 18 | 14 | 23 |
| 7 | 14 | 11 | 18 |
| 8 | 9 | 7 | 12 |
| 9 | 8 | 6 | 11 |
| 10 | 6 | 5 | 8 |
| 12 | 0 | 0 | 1 |

Q10D For how many months during the 2020-2021 school year did you teach students in a mix of learning - some students generally attending in person full-time and other students generally attending virtually full-time.
(Do not include any time that individual or small groups of students attended virtually in order to quarantine or isolate.)

|  | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| 0 | 2 | 1 | 4 |
| 1 | 1 | 0 | 2 |
| 2 | 2 | 1 | 4 |
| 3 | 6 | 4 | 9 |


| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval -upper bound <br> (percentage) <br> 4$\quad 5$ |
| :--- | ---: | ---: | ---: |
| 5 | 9 | 6 | 13 |
| 6 | 8 | 6 | 11 |
| 7 | 8 | 6 | 11 |
| 8 | 9 | 7 | 13 |
| 9 | 23 | 19 | 27 |
| 10 | 24 | 20 | 29 |
| 12 | 1 | 0 | 3 |

Q11 Do you generally know whether your students have another person present when learning virtually, or is this something you don't know?

|  | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Yesponse for most or many of my <br> students, I know if they have <br> another person present. | 20 | 17 | 23 |
| Yes, for some of my students, I <br> know if they have another person <br> present. | 34 | 31 | 37 |
| No, I don't know this information <br> about most or all of my students. | 46 | 43 | 49 |

Note: Teachers who responded that they spent the majority of the 2020-21 school year in a full-time in-person learning environment did not answer this question.

Q12 From your observations during the current school year, how many of your students learning virtually usually had the following people present?
A. An adult but l'm unable to determine whom

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None/Almost none | 16 | 12 | 21 |
| Some | 45 | 38 | 51 |
| About half | 8 | 5 | 12 |
| Most | 15 | 11 | 21 |
| Almost all/All | 14 | 10 | 19 |
| Don't know | 2 | 1 | 5 |

Note: This question was asked of teachers who responded yes to Q11 only.
B. Student's parent or guardian

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None/Almost none | 7 | 4 | 11 |
| Some | 45 | 39 | 52 |
| About half | 11 | 7 | 16 |
| Most | 26 | 21 | 32 |
| Almost all/All | 9 | 5 | 13 |
| Don't know | 3 | 1 | 6 |

Note: This question was asked of teachers who responded yes to Q11 only.
C. An adult who is not the student's parent or guardian

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None/Almost none | 21 | 16 | 27 |
| Some | 58 | 51 | 64 |
| About half | 6 | 3 | 9 |
| Most | 2 | 0 | 4 |
| Almost all/All | 1 | 0 | 3 |
| Don't know | 13 | 9 | 18 |

Note: This question was asked of teachers who responded yes to Q11 only.
D. A trained learning support person/coach/other professional

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None/Almost none | 75 | 69 | 81 |
| Some | 14 | 10 | 19 |
| About half | 1 | 0 | 3 |
| Most | 1 | 0 | 3 |
| Almost all/All | 1 | 0 | 4 |
| Don't know | 8 | 5 | 13 |

Note: This question was asked of teachers who responded yes to Q11 only.
E. A person under the age of 18

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None/Almost none | 23 | 18 | 28 |
| Some | 50 | 44 | 57 |
| About half | 9 | 5 | 13 |
| Most | 5 | 2 | 8 |
| Almost all/All | 2 | 1 | 5 |
| Don't know | 12 | 8 | 17 |

Note: This question was asked of teachers who responded yes to Q11 only.

## F. No one

| Response Estimated percentage of <br> teachers95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |  |  |
| :--- | ---: | ---: | ---: |
| None/Almost none | 35 | 29 | 41 |
| Some | 39 | 33 | 46 |
| About half | 4 | 2 | 7 |
| Most | 8 | 5 | 13 |
| Almost all/All | 3 | 1 | 7 |
| Don't know | 10 | 7 | 15 |

Note: This question was asked of teachers who responded yes to Q11 only.

Q13 Do you have any students who need substantial support or assistance from people at home to participate fully in virtual learning?

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Yes | 69 | 66 | 72 |
| No | 31 | 28 | 34 |

Note: Teachers who responded that they spent the majority of the 2020-21 school year in a full-time in-person learning environment did not answer this question.

Q14 How many of your virtual students who need substantial support or assistance from people at home are...
A. Receiving adequate support during the school day?

|  | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None/Almost none | 14 | 12 | 17 |
| Some | 51 | 48 | 55 |
| About half | 10 | 8 | 12 |
| Most | 11 | 9 | 14 |
| Almost all/All | 5 | 4 | 7 |
| Don't know | 8 | 6 | 10 |

Note: Teachers who answered yes to question 13 were then given question 14 to answer.
B. Receiving adequate support outside the school day, after school (e.g., with homework)?

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None/Almost none | 21 | 18 | 24 |
| Some | 46 | 43 | 50 |
| About half | 8 | 6 | 10 |
| Most | 7 | 6 | 9 |
| Almost all/All | 2 | 1 | 4 |
| Don't know | 15 | 13 | 18 |

[^6]
## Student Learning During the COVID-19 Pandemic

## Q15_T

GAO note: For this set of questions, teachers who spent the majority of the school year in an inperson environment, virtual environment, or hybrid environment were asked to consider their experiences in that particular instructional model. Teachers who spent the majority of the school year in a mix of learning-some students generally attended in person full-time and other students generally attended virtually full-time-were randomly assigned to answer these questions from either the in-person learning perspective or the virtual learning perspective. Teachers proceeded through question 15 after seeing one of the three forms below:

1. FORM_A

For each of the questions in this section, please consider your experiences teaching students who were primarily learning virtually (learning remotely).
Thinking about the time you spent teaching virtually, how many of your students regularly experienced the following difficulties?
2. FORM_B

For each of the questions in this section, please consider your experiences teaching students who were primarily learning in person.
Thinking about the time you spent teaching in person, how many of your students regularly experienced the following difficulties?
3. FORM_C

For each of the questions in this section, please consider your experiences teaching students who were primarily learning in a hybrid setting.

Thinking about the time you spent teaching hybrid, how many of your students regularly experienced the following difficulties?
A. Absence from school or class

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None/Almost none | 14 | 12 | 16 |
| Some | 62 | 60 | 65 |
| About half | 15 | 14 | 17 |
| Most | 6 | 5 | 8 |
| Almost all/All | 2 | 1 | 3 |

B. Late arrival to or early departure from class

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None/Almost none | 17 | 15 | 19 |
| Some | 62 | 60 | 65 |
| About half | 13 | 12 | 15 |
| Most | 6 | 5 | 7 |
| Almost all/All | 2 | 1 | 3 |

## C. Difficulty completing class assignments

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None/Almost none | 9 | 8 | 11 |
| Some | 49 | 47 | 52 |
| About half | 24 | 22 | 27 |
| Most | 13 | 11 | 14 |
| Almost all/All | 4 | 3 | 6 |

D. Difficulty completing homework

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None/Almost none | 7 | 6 | 9 |
| Some | 40 | 37 | 42 |
| About half | 19 | 17 | 21 |
| Most | 13 | 12 | 15 |
| Almost all/All | 7 | 6 | 9 |
| Does not apply | 13 | 12 | 16 |

## E. Difficulty understanding lessons

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None/Almost none | 10 | 9 | 12 |
| Some | 64 | 61 | 66 |
| About half | 18 | 16 | 21 |
| Most | 5 | 4 | 7 |
| Almost all/All | 2 | 1 | 3 |

F. Limited or no class participation

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None/Almost none | 17 | 15 | 19 |
| Some | 45 | 42 | 47 |
| About half | 18 | 17 | 20 |
| Most | 15 | 14 | 17 |
| Almost all/All | 5 | 4 | 6 |

G. Failing a class or being significantly behind meeting academic standards for a subject

|  | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Response | 15 | 13 | 17 |
| None/Almost none | 56 | 54 | 59 |
| Some | 18 | 16 | 20 |
| About half | 9 | 7 | 10 |
| Most | 2 | 2 | 3 |
| Almost all/All |  |  |  |

H. Lack of a dedicated device to use for learning (e.g., personal computer, tablet)

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None/Almost none | 77 | 74 | 80 |
| Some | 20 | 17 | 22 |
| About half | 2 | 1 | 3 |
| Most | 1 | 1 | 2 |
| Almost all/All | 0 | 0 | 1 |

Note: Teachers who responded that they spent the majority of the 2020-21 school year in a full-time in-person learning environment did not answer this question.

## I. Lack of reliable internet service

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None/Almost none | 30 | 27 | 33 |
| Some | 59 | 55 | 62 |
| About half | 8 | 6 | 9 |
| Most | 3 | 2 | 4 |
| Almost all/All | 1 | 0 | 2 |

Note: Teachers who responded that they spent the majority of the 2020-21 school year in a full-time in-person learning environment did not answer this question.
J. Difficulty using devices or other technology to participate in class or complete assignments

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None/Almost none | 42 | 39 | 45 |
| Some | 47 | 45 | 50 |
| About half | 7 | 6 | 8 |
| Most | 3 | 2 | 4 |
| Almost all/All | 1 | 0 | 2 |

K. Difficulty obtaining supplies or educational materials (e.g., pencils, notebooks, paper packets, manipulatives, lab kits, library books)

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None/Almost none | 56 | 53 | 59 |
| Some | 34 | 32 | 37 |
| About half | 6 | 5 | 8 |
| Most | 3 | 2 | 4 |
| Almost all/All | 1 | 0 | 2 |

L. Lack of an appropriate workspace, free from distractions or other difficulties

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None/Almost none | 25 | 23 | 28 |
| Some | 42 | 40 | 45 |
| About half | 19 | 17 | 21 |
| Most | 11 | 9 | 12 |
| Almost all/All | 3 | 2 | 5 |

M. Difficulty getting assistance, support, or supervision at their workspace

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None/Almost none | 29 | 27 | 32 |
| Some | 45 | 43 | 48 |
| About half | 13 | 12 | 15 |
| Most | 10 | 8 | 11 |
| Almost all/All | 2 | 2 | 3 |

## N. Being distracted/busy providing assistance to siblings or younger students

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None/Almost none | 8 | 6 | 10 |
| Some | 56 | 53 | 59 |
| About half | 21 | 19 | 24 |
| Most | 11 | 9 | 13 |
| Almost all/All | 4 | 3 | 6 |

Note: Teachers who responded that they spent the majority of the 2020-21 school year in a full-time in-person learning environment did not answer this question.
O. Lack of adequate breakfast/lunch

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None/Almost none | 49 | 46 | 52 |
| Some | 36 | 33 | 38 |
| About half | 5 | 4 | 6 |
| Most | 2 | 2 | 3 |
| Almost all/All | 1 | 1 | 2 |


|  | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Response | 7 | 6 | 8 |
| Does not apply | 7 |  |  |

## What other factors in students' workspaces, if any, created difficulties in learning?

This question was open-ended. Responses are omitted to preserve respondents' confidentiality.
P. Signs of emotional distress

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None/Almost none | 20 | 18 | 22 |
| Some | 61 | 59 | 64 |
| About half | 13 | 11 | 15 |
| Most | 5 | 4 | 6 |
| Almost all/All | 1 | 1 | 2 |

Q. Focus or attention issues

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None/Almost none | 4 | 3 | 5 |
| Some | 46 | 43 | 48 |
| About half | 28 | 26 | 30 |
| Most | 18 | 16 | 20 |
| Almost all/All | 4 | 3 | 6 |

R. Disruptive behaviors (verbal or physical)

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None/Almost none | 45 | 43 | 48 |
| Some | 49 | 46 | 51 |
| About half | 4 | 3 | 6 |
| Most | 1 | 1 | 2 |
| Almost all/All | 0 | 0 | 1 |

## Q16 Compared to a typical school year, how frequently have each of the following occurred among your students this school year?

GAO note: For this set of questions, teachers who spent the majority of the school year in an inperson environment, virtual environment, or hybrid environment were asked to consider their experiences in that particular instructional model. Teachers who spent the majority of the school year in a mix of learning-some students generally attended in person full-time and other students generally attended virtually full-time-were randomly assigned to answer these questions from either the in-person learning perspective or the virtual learning perspective. Teachers proceeded through question 16 after seeing one of the three forms below:

1. FORM_A For each of the questions in this section, please consider your experiences teaching students who were primarily learning virtually (learning remotely).
Compared to a typical school year, how frequently have each of the following occurred among your students this school year?
2. FORM_B For each of the questions in this section, please consider your experiences teaching students who were primarily learning in person.
Compared to a typical school year, how frequently have each of the following occurred among your students this school year?
3. FORM_C For each of the questions in this section, please consider your experiences teaching students who were primarily learning in a hybrid setting.

Compared to a typical school year, how frequently have each of the following occurred among your students this school year?
A. Absence from school or class

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Much less | 8 | 7 | 10 |
| Somewhat less | 9 | 7 | 10 |
| About the same amount | 19 | 17 | 22 |
| Somewhat more | 38 | 36 | 41 |
| Much more | 25 | 23 | 28 |

## B. Late arrival to or early departure from class

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Much less | 7 | 6 | 9 |
| Somewhat less | 7 | 6 | 9 |
| About the same amount | 30 | 28 | 33 |
| Somewhat more | 33 | 31 | 36 |
| Much more | 22 | 20 | 25 |

## C. Difficulty completing class assignments

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Much less | 3 | 2 | 4 |
| Somewhat less | 5 | 3 | 6 |
| About the same amount | 29 | 26 | 31 |
| Somewhat more | 36 | 33 | 38 |
| Much more | 28 | 26 | 31 |

## D. Difficulty completing homework

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Much less | 3 | 2 | 4 |
| Somewhat less | 4 | 3 | 6 |
| About the same amount | 24 | 22 | 26 |
| Somewhat more | 22 | 20 | 25 |
| Much more | 29 | 26 | 31 |
| Does not apply | 18 | 16 | 21 |

## E. Difficulty understanding lessons

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Much less | 3 | 2 | 4 |
| Somewhat less | 5 | 4 | 6 |
| About the same amount | 41 | 39 | 44 |
| Somewhat more | 38 | 35 | 40 |
| Much more | 13 | 12 | 15 |

F. Limited or no class participation

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Much less | 4 | 3 | 5 |
| Somewhat less | 6 | 5 | 8 |
| About the same amount | 30 | 27 | 32 |
| Somewhat more | 28 | 26 | 31 |
| Much more | 32 | 30 | 35 |

G. Failing a class or being significantly behind meeting academic standards for a subject

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Much less | 4 | 3 | 5 |
| Somewhat less | 4 | 3 | 5 |
| About the same amount | 29 | 27 | 31 |
| Somewhat more | 39 | 37 | 42 |
| Much more | 24 | 22 | 26 |

H. Difficulty using devices or other technology to participate in class or complete assignments

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Much less | 12 | 10 | 14 |
| Somewhat less | 16 | 14 | 18 |
| About the same amount | 42 | 39 | 44 |
| Somewhat more | 22 | 20 | 25 |
| Much more | 8 | 6 | 10 |

I. Difficulty obtaining supplies or educational materials (e.g., pencils, notebooks, paper packets, manipulatives, lab kits, library books)

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Much less | 11 | 10 | 13 |
| Somewhat less | 12 | 10 | 14 |
| About the same amount | 53 | 51 | 56 |
| Somewhat more | 18 | 16 | 20 |
| Much more | 6 | 5 | 8 |

J. Lack of an appropriate workspace, free from distractions or other difficulties

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Much less | 6 | 5 | 7 |
| Somewhat less | 5 | 4 | 6 |
| About the same amount | 31 | 29 | 34 |
| Somewhat more | 33 | 31 | 36 |
| Much more | 25 | 23 | 28 |

K. Difficulty getting assistance, support, or supervision at their workspace

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Much less | 5 | 4 | 7 |
| Somewhat less | 6 | 5 | 8 |
| About the same amount | 36 | 33 | 38 |
| Somewhat more | 32 | 30 | 35 |
| Much more | 20 | 18 | 23 |

L. Lack of school/district-provided breakfast/lunch

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Much less | 29 | 26 | 31 |
| Somewhat less | 9 | 8 | 11 |
| About the same amount | 40 | 38 | 43 |
| Somewhat more | 15 | 13 | 17 |
| Much more | 7 | 6 | 8 |

M. Responsibility for caring for others in the household

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Much less | 3 | 2 | 5 |
| Somewhat less | 3 | 2 | 4 |
| About the same amount | 21 | 19 | 24 |
| Somewhat more | 42 | 38 | 45 |
| Much more | 31 | 28 | 34 |

Note: Teachers who responded that they spent the majority of the 2020-21 school year in a full-time in-person learning environment did not answer this question.
N. Signs of emotional distress

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Much less | 3 | 2 | 4 |
| Somewhat less | 6 | 5 | 7 |
| About the same amount | 30 | 28 | 33 |
| Somewhat more | 47 | 45 | 50 |
| Much more | 14 | 13 | 16 |

## O. Focus or attention issues

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Much less | 2 | 1 | 3 |
| Somewhat less | 3 | 2 | 4 |
| About the same amount | 26 | 23 | 28 |
| Somewhat more | 41 | 38 | 43 |
| Much more | 29 | 27 | 31 |

## P. Disruptive behaviors (verbal or physical)

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Much less | 22 | 20 | 24 |
| Somewhat less | 17 | 15 | 19 |
| About the same amount | 41 | 39 | 44 |
| Somewhat more | 15 | 13 | 17 |
| Much more | 5 | 4 | 6 |

## Q17_T For this next set of questions, please think about all of your students.

Q17 How many of your students were at or above grade level at the beginning of a typical school year?

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None | 5 | 4 | 6 |
| Some | 30 | 28 | 33 |
| About half | 28 | 26 | 30 |
| Most | 35 | 33 | 38 |
| All | 2 | 1 | 3 |

Note: Teachers who responded that they have been teaching for less than 2 years did not answer this question.

Q18 How many of your students were at or above grade level during the beginning of the 2020-2021 school year?

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None | 7 | 5 | 8 |
| Some | 46 | 43 | 48 |
| About half | 25 | 23 | 27 |
| Most | 21 | 20 | 23 |
| All | 1 | 1 | 2 |

Q19 How many of your students were below grade level at the beginning of this school year compared to a typical school year?

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Much less | 1 | 1 | 2 |

[^7]Q20 Currently, or at the end of the 2020-2021 school year...How many of your students were behind grade level?

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None | 4 | 3 | 4 |
| Some | 52 | 49 | 54 |
| About half | 23 | 21 | 26 |
| Most | 19 | 17 | 21 |
| All | 3 | 2 | 4 |

GAO note: There was no Q21 in the survey.

Q22 Currently, or at the end of the 2020-2021 school year...How many of your students were at grade level?

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None | 3 | 2 | 4 |
| Some | 38 | 36 | 41 |
| About half | 27 | 25 | 30 |
| Most | 30 | 28 | 33 |
| All | 1 | 1 | 2 |

GAO note: There was no Q23 in the survey.

Q24 Currently, or at the end of the 2020-2021 school year...How many of your students were above grade level?

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None | 13 | 11 | 15 |
| Some | 78 | 76 | 80 |
| About half | 5 | 4 | 6 |
| Most | 4 | 3 | 4 |
| All | 0 | 0 | 1 |

Q25 Still thinking about all of your students, which of the following best describes the amount of academic progress your students have made this year, compared to a typical school year?

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Significantly less progress | 19 | 17 | 21 |
| Somewhat less progress | 45 | 42 | 47 |
| About the same amount of <br> progress | 25 | 23 | 27 |
| Somewhat more progress | 9 | 8 | 11 |
| Significantly more progress | 2 | 1 | 3 |

Note: Teachers who responded that they have been teaching for less than 2 years did not answer this question.

Q26 During the 2020-2021 school year, did you have students who have made less academic progress than you would have expected in a typical school year?

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Yes | 84 | 82 | 86 |
| No | 16 | 14 | 18 |

Note: Teachers who responded that they have been teaching for less than 2 years did not answer this question.

Q27 Please think about your students who made less academic progress this year compared to a typical school year. Did each of the following factors contribute to these students making less progress?

GAO note: Only teachers who answered yes to Q26 were asked Q27.
A. Difficulties related to learning virtually (e.g., weak or no internet connection, not having a dedicated workspace for learning)

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Yes | 79 | 77 | 82 |
| No | 16 | 14 | 18 |
| Does not apply | 5 | 4 | 7 |

B. Students starting off the school year below grade level

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Yes | 82 | 80 | 84 |
| No | 16 | 14 | 18 |
| Does not apply | 2 | 2 | 3 |

C. Changes to curriculum

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Yes | 24 | 22 | 27 |
| No | 56 | 53 | 59 |
| Does not apply | 20 | 18 | 22 |

D. Absence of consequences for a lack of academic progress

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Yes | 77 | 74 | 79 |
| No | 19 | 17 | 21 |
| Does not apply | 5 | 3 | 6 |

E. Inability to cover as much content or go into as much depth

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Yes | 74 | 71 | 77 |
| No | 23 | 20 | 25 |
| Does not apply | 3 | 2 | 4 |

F. Changes at home caused by the pandemic (e.g., job loss in family, pandemic-related move)

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Yes | 80 | 78 | 82 |
| No | 16 | 13 | 18 |
| Does not apply | 4 | 3 | 6 |

G. Social or emotional issues

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Yes | 83 | 80 | 85 |
| No | 14 | 12 | 17 |
| Does not apply | 3 | 2 | 4 |

Q28 Thinking about your students who have made more academic progress this year compared to a typical school year, explain what factors contributed to that progress.

This question was open-ended. Responses are omitted to preserve respondents' confidentiality. Also, teachers who responded that they have been teaching for less than 2 years did not answer this question.

## Strategies for Supporting Learning and Addressing Learning Loss During the Pandemic

## Q29 Approximately, how often during this school year have you used the following strategies to support learning or address learning loss?

> GAO note: For this set of questions, teachers who spent the majority of the school year in an inperson environment, virtual environment, or hybrid environment were asked to consider their experiences in that particular instructional model. Teachers who spent the majority of the school year in a mix of learning-some students generally attended in person full-time and other students generally attended virtually full-time-were randomly assigned to answer these questions from either the in-person learning perspective or the virtual learning perspective. Teachers proceeded through question 29 after seeing one of the three forms below:

1. FORM_A

For each of the questions in this section, please consider your experiences teaching students who were primarily learning virtually (learning remotely).
2. FORM_B

For each of the questions in this section, please consider your experiences teaching students who were primarily learning in person.
3. FORM_C

For each of the questions in this section, please consider your experiences teaching students who were primarily hybrid learning.
(Learning loss is the extent to which a student is behind where they would be at the same point in a typical school year.)

## A. Use of live, virtual instruction

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Never | 2 | 1 | 3 |
| A few times during the school <br> year | 4 | 3 | 6 |
| About once or twice per month | 3 | 2 | 4 |
| About once or twice per week | 11 | 9 | 13 |
| Every day or almost every day | 80 | 77 | 82 |

Note: Teachers who responded that they spent the majority of the 2020-21 school year in a full-time in-person learning environment did not answer this question.
B. Use of live, in-person instruction

|  | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Nevponse | 3 | 2 | 4 |
| A few times during the school <br> year | 4 | 3 | 5 |
| About once or twice per month | 1 | 1 | 2 |
| About once or twice per week | 9 | 8 | 11 |
| Every day or almost every day | 83 | 80 | 85 |

Note: Teachers who responded that they spent the majority of the 2020-21 school year in a full-time virtual learning environment did not answer this question.

## C. Use of asynchronous learning (recordings, independent work time)

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Never | 6 | 5 | 7 |
| A few times during the school <br> year | 17 | 15 | 19 |
| About once or twice per month | 9 | 8 | 11 |
| About once or twice per week | 27 | 25 | 30 |
| Every day or almost every day | 41 | 39 | 44 |

## D. Small group work connecting over devices

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Never | 19 | 17 | 21 |
| A few times during the school | 23 | 20 | 25 |
| year | 12 | 11 | 14 |
| About once or twice per month | 25 | 23 | 27 |
| About once or twice per week | 21 | 19 | 24 |
| Every day or almost every day |  |  |  |

## E. Small group work in person

|  | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Nevponse | 29 | 27 | 32 |
| A few times during the school <br> year | 18 | 16 | 20 |
| About once or twice per month | 8 | 7 | 9 |
| About once or twice per week | 22 | 20 | 25 |
| Every day or almost every day | 23 | 20 | 25 |

F. Use of educational apps or platforms for subject learning activities (e.g., Lexia, Canvas)

|  | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Nesponse | 9 | 8 | 11 |
| A few times during the school <br> year | 7 | 6 | 8 |
| About once or twice per month | 7 | 6 | 8 |
| About once or twice per week | 18 | 16 | 20 |
| Every day or almost every day | 59 | 56 | 61 |

G. Use of apps or platforms to submit assignments and provide feedback (e.g., Seesaw, Google Classroom)

|  | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Never | 4 | 3 | 5 |
| A few times during the school | 4 | 3 | 5 |
| year | 4 | 3 | 5 |
| About once or twice per month | 41 | 9 | 13 |
| About once or twice per week | 78 | 75 | 80 |
| Every day or almost every day | 4 |  |  |

H. Use of paper packets, manipulatives, or other physical instructional materials

|  | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Nevponse | 26 | 24 | 28 |
| A few times during the school <br> year | 21 | 19 | 23 |
| About once or twice per month | 9 | 7 | 10 |
| About once or twice per week | 21 | 19 | 23 |
| Every day or almost every day | 24 | 22 | 27 |

I. Increased number of teachers or staff to support student learning

|  | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Nesponse | 61 | 59 | 64 |
| A few times during the school <br> year | 14 | 12 | 15 |
| About once or twice per month | 5 | 4 | 6 |
| About once or twice per week | 9 | 7 | 11 |
| Every day or almost every day | 11 | 10 | 13 |

## J. Team building/get-to-know-you activities

|  | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Nevporse | 11 | 9 | 12 |
| A few times during the school | 44 | 42 | 47 |
| year | 15 | 13 | 17 |
| About once or twice per month | 18 | 16 | 20 |
| About once or twice per week | 12 | 11 | 14 |
| Every day or almost every day |  |  |  |

## K. One-on-one check-ins between teacher and student

|  | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Response | 5 | 4 | 6 |
| A few times during the school <br> year | 21 | 19 | 24 |
| About once or twice per month | 25 | 22 | 27 |
| About once or twice per week | 28 | 26 | 31 |
| Every day or almost every day | 21 | 19 | 23 |

L. One-on-one or small group meetings with counselor

|  | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Nesponse | 35 | 33 | 38 |
| A few times during the school <br> year | 38 | 35 | 40 |
| About once or twice per month | 15 | 13 | 18 |
| About once or twice per week | 9 | 8 | 11 |
| Every day or almost every day | 2 | 1 | 3 |

M. Reaching out to parents or guardians to discuss social/emotional needs

|  | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Nevponse | 6 | 5 | 7 |
| A few times during the school | 34 | 32 | 37 |
| year | 32 | 30 | 35 |
| About once or twice per month | 21 | 19 | 24 |
| About once or twice per week | 6 | 5 | 8 |
| Every day or almost every day |  |  |  |

N. Use of individual or small group tutoring sessions during the school day

|  | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Nesponse | 14 | 12 | 16 |
| A few times during the school <br> year | 18 | 16 | 20 |
| About once or twice per month | 14 | 13 | 16 |
| About once or twice per week | 31 | 29 | 34 |
| Every day or almost every day | 23 | 21 | 25 |

O. Providing after school or weekend tutoring

| Response | Estimated percentage of teachers | 95 percent confidence interval - lower bound (percentage) | 95 percent confidence interval - upper bound (percentage) |
| :---: | :---: | :---: | :---: |
| Never | 41 | 38 | 43 |
| A few times during the school year | 15 | 13 | 17 |
| About once or twice per month | 8 | 7 | 10 |
| About once or twice per week | 19 | 17 | 21 |
| Every day or almost every day | 9 | 8 | 11 |
| Does not apply | 8 | 7 | 10 |

## P. Movement breaks

|  | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Response | 14 | 13 | 16 |
| A few times during the school | 11 | 10 | 13 |
| year | 7 | 6 | 8 |
| About once or twice per month | 16 | 14 | 18 |
| About once or twice per week | 52 | 49 | 55 |
| Every day or almost every day |  |  |  |

Q. Providing extended school day (e.g., allowing students to learn during times other than the typical school day hours)

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Never | 58 | 54 | 61 |
| A few times during the school <br> year | 10 | 8 | 12 |
| About once or twice per month | 6 | 4 | 7 |
| About once or twice per week | 11 | 9 | 13 |
| Every day or almost every day | 15 | 13 | 18 |

Note: Teachers who responded that they spent the majority of the 2020-21 school year in a full-time virtual learning environment did not answer this question.
R. Providing flexible school day (e.g., allowing students to learn during times other than the typical school day hours)

|  | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Response | 33 | 30 | 36 |
| A few times during the school <br> year | 12 | 10 | 14 |
| About once or twice per month | 8 | 7 | 10 |
| About once or twice per week | 15 | 13 | 18 |
| Every day or almost every day | 32 | 29 | 35 |

Note: Teachers who responded that they spent the majority of the 2020-21 school year in a full-time in-person learning environment did not answer this question.

## Q30 How many of your students improved their academic progress as a result of each of the following strategies?

GAO note: For this set of questions, teachers who spent the majority of the school year in an inperson environment, virtual environment, or hybrid environment were asked to consider their experiences in that particular instructional model. Teachers who spent the majority of the school year in a mix of learning-some students generally attended in person full-time and other students generally attended virtually full-time-were randomly assigned to answer these questions from either the in-person learning perspective or the virtual learning perspective. Teachers were not asked about strategies they responded to having never used in Q29.
A. Use of live, virtual instruction

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None/Almost None | 8 | 6 | 9 |
| Some | 37 | 34 | 40 |
| About half | 13 | 11 | 15 |
| Most | 26 | 23 | 29 |
| Almost All/All | 18 | 15 | 20 |

B. Use of live, in-person instruction

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None/Almost None | 1 | 1 | 2 |

C. Use of asynchronous learning (recordings, independent work time)

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None/Almost None | 14 | 12 | 15 |
| Some | 49 | 46 | 52 |
| About half | 17 | 15 | 19 |
| Most | 14 | 12 | 16 |
| Almost All/All | 7 | 6 | 8 |

D. Small group work connecting over devices

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None/Almost None | 17 | 15 | 19 |
| Some | 46 | 44 | 49 |
| About half | 13 | 11 | 15 |
| Most | 17 | 14 | 19 |
| Almost All/All | 7 | 6 | 9 |

E. Small group work in person

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None/Almost None | 9 | 7 | 11 |
| Some | 31 | 28 | 33 |
| About half | 14 | 12 | 16 |
| Most | 28 | 25 | 31 |
| Almost All/All | 19 | 16 | 21 |

F. Use of educational apps or platforms for subject learning activities (e.g., Lexia, Canvas)

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None/Almost None | 7 | 6 | 9 |
| Some | 37 | 34 | 40 |
| About half | 16 | 14 | 18 |
| Most | 22 | 20 | 24 |
| Almost All/All | 18 | 16 | 20 |

G. Use of apps or platforms to submit assignments and get feedback (e.g., Seesaw, Google Classroom)

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None/Almost None | 6 | 5 | 7 |
| Some | 29 | 27 | 32 |
| About half | 13 | 11 | 15 |
| Most | 26 | 24 | 29 |
| Almost All/All | 26 | 24 | 28 |

H. Use of paper packets, manipulatives, or other physical instructional materials

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None/Almost None | 12 | 10 | 14 |
| Some | 35 | 32 | 38 |
| About half | 14 | 12 | 16 |
| Most | 25 | 22 | 28 |
| Almost All/All | 15 | 13 | 17 |

I. Increased number of teachers or staff to support student learning

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None/Almost None | 14 | 11 | 18 |
| Some | 42 | 38 | 47 |
| About half | 12 | 9 | 15 |
| Most | 19 | 16 | 23 |
| Almost All/All | 13 | 10 | 16 |

J. Team building/get-to-know-you activities

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None/Almost None | 21 | 19 | 24 |
| Some | 47 | 44 | 49 |
| About half | 10 | 9 | 12 |
| Most | 13 | 11 | 15 |
| Almost All/All | 8 | 7 | 10 |

K. One-on-one check-ins between teacher and student

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None/Almost None | 5 | 4 | 6 |
| Some | 43 | 40 | 46 |
| About half | 15 | 13 | 17 |
| Most | 23 | 21 | 25 |
| Almost All/All | 14 | 12 | 16 |

L. One-on-one or small group meetings with counselor

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None/Almost None | 17 | 14 | 20 |
| Some | 55 | 52 | 59 |
| About half | 9 | 7 | 11 |
| Most | 14 | 11 | 16 |
| Almost All/All | 5 | 3 | 7 |

M. Reaching out to parents or guardians to discuss social/emotional needs

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None/Almost None | 7 | 6 | 9 |
| Some | 57 | 55 | 60 |
| About half | 14 | 12 | 16 |
| Most | 15 | 13 | 17 |
| Almost All/All | 7 | 6 | 9 |

N. Use of individual or small group tutoring sessions during the school day

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None/Almost None | 10 | 8 | 11 |
| Some | 50 | 47 | 52 |
| About half | 12 | 10 | 14 |
| Most | 18 | 16 | 20 |
| Almost All/All | 11 | 9 | 13 |

O. Providing after school or weekend tutoring

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None/Almost None | 17 | 14 | 20 |
| Some | 58 | 54 | 61 |
| About half | 9 | 7 | 11 |
| Most | 12 | 10 | 14 |
| Almost All/All | 5 | 4 | 7 |

## P. Movement breaks

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None/Almost None | 16 | 14 | 18 |
| Some | 41 | 38 | 44 |
| About half | 12 | 10 | 14 |
| Most | 18 | 16 | 21 |
| Almost All/All | 13 | 11 | 15 |

Q. Providing extended school day or flexible school day (e.g., allowing students to learn during times other than the typical school day hours)

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None/Almost None | 13 | 10 | 17 |
| Some | 55 | 49 | 60 |
| About half | 14 | 11 | 18 |
| Most | 10 | 8 | 14 |
| Almost All/All | 7 | 5 | 11 |

R. Providing flexible school day (e.g., allowing students to learn during times other than the typical school day hours)

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None/Almost None | 14 | 11 | 17 |
| Some | 49 | 45 | 53 |
| About half | 12 | 10 | 15 |
| Most | 15 | 12 | 18 |
| Almost All/All | 10 | 8 | 13 |

## Q31A What other strategies were most useful for helping your students make academic progress?

This question was open-ended. Responses are omitted to preserve respondents' confidentiality.
Q31B What was the most useful strategy for addressing learning loss?

This question was open-ended. Responses are omitted to preserve respondents' confidentiality.
Q32 Briefly describe what strategies have been the most helpful for teaching English Learners this school year. For example, this may include strategies for teaching vocabulary or sentence framing, such as using directions that include images or allowing students to record responses rather than spell them out in writing.

This question was open-ended. Responses are omitted to preserve respondents' confidentiality. Teachers who responded they had no English Learners earlier in the survey did not answer this question.

## Q33 Given your experiences teaching during the pandemic, what additional resources would help students to learn successfully in any future disruptions to the typical learning environment?

This question was open-ended. Responses are omitted to preserve respondents' confidentiality.

This section of the survey asks about students with whom your school had limited contact this school year. First, we'll ask you about students who were unaccounted for and then we will ask you about students who were disengaged.

Unaccounted for: Students who were registered to be in your class(es) but who did not attend all year. These students are sometimes referred to as "no shows".

Disengaged: Students whose limited participation in your class(es) greatly affected their learning or grades. Examples of limited participation include:

- logging in but not participating,
- attending class but not completing or turning in work, or
- missing a substantial number of classes.

Q34 Thinking about the current school year, how many unaccounted-for students did you have?
(Students who were registered to be in your class(es) but who did not attend all year.)

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| No unaccounted-for students | 52 | 50 | 55 |
| 1 or more unaccounted-for <br> students | 48 | 45 | 50 |

Note: We asked teachers to provide a number for how many unaccounted-for students they had, but we report the results here in two groupings: no students and 1 or more students.

Q35 How many disengaged students did you have?
(Students whose limited participation in your class(es) greatly affected their learning or grades.)

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| No disengaged students | 15 | 13 | 17 |
| 1 or more disengaged students | 85 | 83 | 87 |

Note: We asked teachers to provide a number for how many disengaged students they had, but we report the results here in two groupings: no students and 1 or more students.

Q36 Still thinking about the current school year, how does the number of unaccounted-for students compare to a typical school year?
(Students who were registered to be in your class(es) but who did not attend all year.)

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Substantially fewer | 9 | 7 | 10 |
| Somewhat fewer | 2 | 2 | 3 |
| About the same | 46 | 43 | 49 |
| Somewhat more | 19 | 17 | 22 |
| Substantially more | 24 | 22 | 26 |

Note: Teachers who responded that they have been teaching for less than 2 years did not answer this question.

Q37 Still thinking about the current school year, how does the number of disengaged students compare to a typical school year?
(Students whose limited participation in your class(es) greatly affected their learning or grades.)

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Substantially fewer | 4 | 3 | 6 |
| Somewhat fewer | 2 | 1 | 3 |
| About the same | 20 | 18 | 23 |
| Somewhat more | 29 | 27 | 31 |
| Substantially more | 44 | 42 | 47 |

Note: Teachers who responded that they have been teaching for less than 2 years did not answer this question.

## Q38 How much of a factor were each of the following reasons in explaining why these students were unaccounted for?

Note: Teachers who responded they did not have any unaccounted for students did not answer this question.
A. Student had difficulty learning in or adapting to the virtual environment

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Not at all a factor | 6 | 5 | 8 |
| Not too much of a factor | 8 | 6 | 10 |
| Somewhat of a factor | 22 | 19 | 25 |
| Significant factor | 38 | 35 | 41 |
| Don't know | 26 | 23 | 29 |

B. Student had limited or no adult assistance or support at home

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Not at all a factor | 3 | 2 | 5 |
| Not too much of a factor | 3 | 2 | 4 |
| Somewhat of a factor | 17 | 15 | 20 |
| Significant factor | 56 | 53 | 60 |
| Don't know | 20 | 18 | 23 |

C. Student was providing care to a family member

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Not at all a factor | 12 | 10 | 15 |
| Not too much of a factor | 11 | 9 | 13 |
| Somewhat of a factor | 25 | 22 | 29 |
| Significant factor | 20 | 18 | 23 |
| Don't know | 32 | 28 | 35 |

D. Student had work commitments that interfered with school

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Not at all a factor | 31 | 27 | 34 |
| Not too much of a factor | 10 | 8 | 12 |
| Somewhat of a factor | 15 | 13 | 17 |
| Significant factor | 15 | 13 | 17 |
| Don't know | 30 | 26 | 33 |

E. Student did not have reliable internet access

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Not at all a factor | 18 | 16 | 21 |
| Not too much of a factor | 18 | 16 | 21 |
| Somewhat of a factor | 27 | 24 | 31 |
| Significant factor | 18 | 15 | 21 |
| Don't know | 18 | 15 | 21 |

F. Student did not have a device for accessing the internet (e.g., personal computer, tablet) or had to share the device

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Not at all a factor | 56 | 52 | 59 |
| Not too much of a factor | 15 | 13 | 18 |
| Somewhat of a factor | 9 | 7 | 12 |
| Significant factor | 7 | 6 | 10 |
| Don't know | 13 | 10 | 15 |

## Q39 How much of a factor were each of the following reasons in explaining why these students were disengaged?

Note: Teachers who responded they did not have any disengaged students did not answer this question.
A. Student had difficulty learning in or adapting to the virtual environment

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Not at all a factor | 6 | 5 | 8 |
| Not too much of a factor | 8 | 6 | 9 |
| Somewhat of a factor | 28 | 26 | 31 |
| Significant factor | 52 | 49 | 54 |
| Don't know | 7 | 5 | 8 |

B. Student had limited or no adult assistance or support at home

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Not at all a factor | 3 | 2 | 4 |
| Not too much of a factor | 5 | 4 | 7 |
| Somewhat of a factor | 23 | 20 | 25 |
| Significant factor | 60 | 58 | 63 |
| Don't know | 9 | 7 | 10 |

C. Student was providing care to a family member

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Not at all a factor | 17 | 15 | 19 |
| Not too much of a factor | 18 | 16 | 21 |
| Somewhat of a factor | 28 | 26 | 31 |
| Significant factor | 16 | 14 | 18 |
| Don't know | 20 | 18 | 23 |

D. Student had work commitments that interfered with school

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Not at all a factor | 48 | 45 | 50 |
| Not too much of a factor | 11 | 9 | 13 |
| Somewhat of a factor | 14 | 13 | 16 |
| Significant factor | 11 | 10 | 13 |
| Don't know | 16 | 14 | 18 |

E. Student did not have reliable internet access

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Not at all a factor | 22 | 19 | 24 |
| Not too much of a factor | 25 | 23 | 28 |
| Somewhat of a factor | 30 | 27 | 33 |
| Significant factor | 16 | 14 | 19 |
| Don't know | 7 | 5 | 8 |

F. Student did not have a device for accessing the internet (e.g., personal computer, tablet) or had to share the device

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Not at all a factor | 65 | 62 | 68 |
| Not too much of a factor | 15 | 13 | 17 |
| Somewhat of a factor | 9 | 8 | 11 |
| Significant factor | 6 | 5 | 8 |
| Don't know | 4 | 3 | 5 |

Q40 How many of your unaccounted-for and disengaged students had each of the following characteristics? Please select "Don't know" if you are not familiar with the students' characteristics.
A. From a low-income household

|  | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: | ---: |
| Response | 5 | 4 | 6 |
| None | 20 | 18 | 22 |
| Some |  |  |  |


|  | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| About half | 9 | 8 | 11 |
| Most | 29 | 27 | 32 |
| All | 19 | 17 | 21 |
| Don't know | 18 | 16 | 20 |

## B. From a food-insecure household

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None | 10 | 9 | 12 |
| Some | 23 | 21 | 25 |
| About half | 8 | 7 | 10 |
| Most | 16 | 14 | 18 |
| All | 6 | 4 | 7 |
| Don't know | 37 | 34 | 39 |

C. A member of a racial or ethnic minority group

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None | 11 | 10 | 13 |
| Some | 26 | 24 | 29 |
| About half | 10 | 9 | 12 |
| Most | 24 | 21 | 26 |
| All | 20 | 17 | 22 |
| Don't know | 8 | 7 | 10 |

## D. English learner

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None | 37 | 34 | 39 |
| Some | 37 | 35 | 40 |
| About half | 8 | 6 | 9 |
| Most | 7 | 5 | 8 |
| All | 5 | 4 | 7 |
| Don't know | 7 | 6 | 8 |

## E. Has an IEP

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None | 24 | 22 | 27 |
| Some | 55 | 52 | 58 |
| About half | 8 | 7 | 10 |
| Most | 4 | 3 | 6 |
| All | 3 | 2 | 4 |
| Don't know | 5 | 4 | 7 |

## F. Has a 504 plan

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None | 34 | 31 | 37 |
| Some | 52 | 49 | 54 |
| About half | 3 | 2 | 4 |
| Most | 2 | 1 | 3 |
| All | 0 | 0 | 1 |
| Don't know | 10 | 8 | 11 |

G. Homeless or has been homeless this school year

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None | 40 | 37 | 43 |
| Some | 21 | 19 | 24 |
| About half | 0 | 0 | 1 |
| Most | 0 | 0 | 1 |
| All | 0 | 0 | 1 |
| Don't know | 38 | 35 | 41 |

H. Failing or potentially failing a class or grade; or significantly behind meeting academic standards for a subject

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None | 5 | 4 | 6 |
| Some | 34 | 31 | 36 |
| About half | 12 | 10 | 14 |
| Most | 27 | 24 | 29 |
| All | 17 | 15 | 20 |
| Don't know | 6 | 4 | 7 |

I. Has a parent or guardian whose job requires them to work outside the home (e.g., an essential worker)

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None | 5 | 4 | 7 |
| Some | 23 | 21 | 26 |
| About half | 10 | 8 | 12 |
| Most | 23 | 21 | 25 |
| All | 6 | 5 | 8 |
| Don't know | 32 | 30 | 35 |

J. Other

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| None | 40 | 34 | 46 |
| Some | 37 | 31 | 43 |
| About half | 9 | 6 | 13 |
| Most | 9 | 6 | 12 |
| All | 6 | 4 | 9 |

## Q41 Thinking about your unaccounted-for students, what additional resources would you have needed to reengage them?

This question was open-ended. Responses are omitted to preserve respondents' confidentiality. Teachers who responded they did not have any unaccounted for students did not answer this question.
Q41a Thinking about your disengaged students, what additional resources would you have needed to reengage them?

This question was open-ended. Responses are omitted to preserve respondents' confidentiality. Teachers who responded they did not have any disengaged students did not answer this question.

Finally, we have a few questions that will be used for demographic purposes only.

D1 What is your age?

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Aged 21-30 | 15 | 13 | 17 |
| Aged 31-40 | 29 | 26 | 31 |
| Aged 41-50 | 30 | 28 | 33 |
| Aged 51-60 | 19 | 17 | 21 |
| Aged 61-70 | 6 | 5 | 8 |
| Aged 71-80 | 1 | 0 | 1 |
| Aged $81-90$ | 0 | 0 | 0 |
| Aged $91-100$ | 0 | 0 | 0 |

Note: While we asked this as an open-ended questions, we aggregated responses by 10 year age bands.

## D2 What is your gender?

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Male | 25 | 23 | 27 |
| Female | 74 | 72 | 76 |
| Other | 0 | 0 | 0 |
| Prefer not to answer | 1 | 1 | 2 |

D3 Are you of Hispanic, Latino, or Spanish origin? For example, Mexican, Mexican American, Chicano, Puerto Rican, Cuban, or another Hispanic, Latino, or Spanish origin?

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| Yes | 9 | 7 | 11 |
| No | 91 | 89 | 93 |

D4 Which of the following describes your race? You may select one or more.

| Response | Estimated number of teachers | 95 percent confidence interval - lower bound (number) | 95 percent confidence interval - upper bound (number) |
| :---: | :---: | :---: | :---: |
| White | 1,932,644 | 1,848,516 | 2,016,771 |
| Black or African-American | 190,740 | 153,795 | 227,686 |
| Asian | 56,204 | 36,698 | 75,710 |
| American Indian or Alaska Native | 27,882 | 16,592 | 39,172 |
| Native Hawaiian or Pacific Islander | 6,500 | 0 | 13,200 |
| Other (please list) | 19,950 | 12,517 | 27,382 |

D5 What is the highest level of school you have completed or the highest degree you have received?

| Response | Estimated percentage of teachers | 95 percent confidence interval - lower bound (percentage) | 95 percent confidence interval - upper bound (percentage) |
| :---: | :---: | :---: | :---: |
| High school graduate | 0 | 0 | 0 |
| Technical, trade, vocational or business school or program after high school | 0 | 0 | 0 |
| Some college - college, university or community college - but no degree | 0 | 0 | 1 |
| Two-year associate degree from a college, university, or community college | 1 | 0 | 1 |
| Four-year bachelor's degree (e.g., BS, BA, AB) | 22 | 20 | 25 |
| Some postgraduate or professional schooling but no degree (e.g., some graduate school) | 15 | 14 | 17 |
| Postgraduate or professional degree, including master's or doctorate (e.g., MA, MS, PhD, MD, JD) | 61 | 58 | 64 |

## D6 In which state do you teach?

Responses are omitted to preserve respondents' confidentiality.

## D7 In which city do you teach?

Responses are omitted to preserve respondents' confidentiality.

D8 What is the name of the school where you currently teach? We will use information about your school for demographic purposes only. We will not share results by school and your results will never be shared with your school.

Responses are omitted to preserve respondents' confidentiality.
D9 What is the ZIP Code where your school is located?
Responses are omitted to preserve respondents' confidentiality.

Q2_2 Which of the following best describes the location of the school you taught at during the 2020-2021 school year?

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| A rural area or small town | 33 | 30 | 35 |
| A large city | 28 | 26 | 31 |
| A suburb of a large city | 39 | 36 | 41 |

D11 Approximately what percentage of students in your classes receive free or reduced lunch?

| Response | Estimated percentage of <br> teachers | 95 percent confidence <br> interval - lower bound <br> (percentage) | 95 percent confidence <br> interval - upper bound <br> (percentage) |
| :--- | ---: | ---: | ---: |
| $0-20 \%$ | 18 | 16 | 20 |
| $21-40 \%$ | 16 | 14 | 18 |
| $41-60 \%$ | 17 | 15 | 19 |
| $61-80 \%$ | 13 | 12 | 15 |
| $81-100 \%$ | 36 | 34 | 39 |

## Technical Description of Discussion Groups with Educators and Parents

To gain further insights about the topics covered in our survey of K-12 public school teachers and to get the perspectives of other K-12 stakeholders, we held 18 virtual discussion groups with public school teachers (six groups), parents of students (six groups), and principals (six groups) between June 29 and July 14, 2021. ${ }^{1}$ We contracted with Gallup to recruit and arrange the K-12 public school groups. In addition, to respond to a provision in the conference report accompanying the National Defense Authorization Act of Fiscal Year 2021 for GAO to conduct a review of virtual learning in Department of Defense Education Activity (DODEA) schools, we held two additional discussion groups. One group was with teachers and the other with parents of students in DODEA schools on July 19, 2021 and July 21, 2021, respectively. We worked with DODEA to recruit and arrange these two discussion groups. To select discussion group comments for the reports, we first analyzed and coded the discussion group transcripts to identify common themes among the groups. We then compared these themes to our survey results to identify comments that were illustrative of the key themes across the survey and discussion group analyses. Comments, information, and views obtained from these discussion groups are not generalizable to other educators and parents.

## Discussion Groups with K-12 Public School Educators and Parents

GAO moderators structured and guided the discussions using a standardized list of questions to encourage participants to share their thoughts and experiences on students' learning during school year 2020-21 and strategies used to mitigate learning loss. We developed discussion guides tailored to each stakeholder group (teachers, principals, and parents) without Gallup's input. Prior to conducting any of the discussion groups with participants recruited by Gallup, we pretested our discussion guide with one teacher, two parents, and two principals.

Gallup recruited and screened participants and managed the logistics of convening the groups with K-12 public school educators and parents. In total, Gallup arranged 18 virtual discussion groups with three participant categories: teachers, parents, and principals. Each participant category was further segmented based on their school's geographic location (urban, suburban or rural), with two groups for each participant type and location. In the end, we held six groups with K-12 public school teachers, six groups with parents of children in K-12 public schools, and six groups with K-12 public school principals.

Teachers participating in the groups had also responded to our generalizable teacher survey in June 2021. After each teacher discussion group, Gallup emailed teacher participants to thank them for their participation and requested that they share referrals with parents and principals. These referrals accounted for about 5 percent of parents and 10 percent of principals. To supplement the referrals, Gallup first recruited parents from surrounding communities (an additional 45 percent of parents) and then from the same state as the teachers (the remaining 50 percent of parents). Similarly, Gallup recruited additional principals from the teachers' schools or other schools in the same school district (about 20 percent of principals) and then from the same state as the teachers (another 60 percent of principals). Gallup leveraged its network for the final 10 percent of principals.

[^8]We initially set a minimum group size of four and a maximum of eight to create a group dynamic that would allow sufficient interaction among participants and enable them to share their perspectives in the allotted time period. In the end, all of our discussion groups had between four and nine participants. Discussion groups were held by video conference in the evenings and lasted one hour each to accommodate the schedules of participants. The contractor also created a written transcript of each group. Comments, information and views obtained from these discussion groups are not generalizable to other educators and parents.

## Discussion Groups with DODEA Teachers and Parents

DODEA operates the Department of Defense's school system and is responsible for planning, directing, coordinating, and managing educational programs for military dependent children from pre-kindergarten through grade 12. As of March 2022, the majority of DODEA's 160 accredited schools were located on overseas installations, but DODEA also operated 45 schools on 13 installations in seven states. Similar to K-12 public school students, many students at DODEA schools spent time learning in a virtual environment during school year 2020-21. For our discussion groups with DODEA teachers and parents (one group each), we selected a nongeneralizable sample from DODEA's Southeast district in the U.S., which had the highest percentage of stateside students in full-time virtual status as of October 2020.

For consistency across groups, we recruited groups of the same size for our K-12 public school discussion groups. To solicit participants for our discussion groups, we asked DODEA to send an email to teachers and parents to inform them of our request. Teachers and parents interested in participating responded to us directly. We received more responses than we could accommodate, so we considered five factors in selecting participants: (1) military installation within the Southeast district, (2) grade levels teachers taught or grade level students were in, (3) subjects teachers taught, (4) gender of teachers and parents, and (5) race or ethnicity of teachers and parents. In the end, five DODEA teachers participated in one group and five DODEA parents participated in the other. As with our K-12 public school groups, we held the group discussions by video conference in the evenings and each lasted one hour. We used the same discussion guides as we did for our K-12 public school teacher and parent groups, although we made limited revisions to ensure our questions were relevant in the DODEA context. Comments, information, and views obtained from these discussion groups are not generalizable to other DODEA teachers and parents.


[^0]:    ${ }^{1}$ We instructed respondents not to include any time that individual or small groups of students attended virtually in order to quarantine or isolate.

[^1]:    Source: Gallup | GAO-22-105817

[^2]:    ${ }^{2}$ The American Association for Public Opinion Research's response rate 3 (unknown eligibility) was used to calculate the estimated number of eligible respondents.

[^3]:    ${ }^{3}$ Gallup's margin of error target for whether a teacher had a high percentage of English learners was 25 percent or more.
    ${ }^{4}$ If the teacher reported working with students across our grade level categories (e.g., worked with both second- and third-grade students, we assigned the teacher to the grade level category of the earliest grade taught).
    ${ }^{5}$ Our odds ratio analysis and regression modeling, described later in this section, grouped grade levels as K-5, 6-8, and 9-12 due to our sampling size limitations.
    ${ }^{6}$ D.W. Hosmer, S. Lemeshow, and R.X. Sturdivant. 2013. Applied Logistic Regression (John Wiley \& Sons. Hoboken, New Jersey).

[^4]:    ${ }^{7}$ The survey asked respondents to select one of the following five options: none/almost none, some, about half, most, and almost all/all. We grouped these responses into two categories for modeling: less than half and about half or more.
    ${ }^{8}$ We asked Gallup to construct a three-way categorization of FRPL participation for which each category produced margin of error estimates no larger than $+/-7$ percent. Gallup constructed the low category to include teachers who responded 20 percent or less of their students participated in FRPL, the mid category to include teachers who responded 21 through 80 percent of their students participated in FRPL, and the high category to include teachers who responded more than 80 percent of their students participated in FRPL.

[^5]:    ${ }^{9}$ Jeffrey M. Wooldridge, Econometric Analysis of Cross Section and Panel Data (Cambridge: MIT Press, 2002), 592596.

[^6]:    Note: Teachers who answered yes to question 13 were then given question 14 to answer.

[^7]:    Note: Teachers who responded that they have been teaching for less than 2 years did not answer this question nor did teachers who responded that all of their students were at or above grade level at the beginning of the 2020-21 school year and at the beginning of a typical school year.

[^8]:    ${ }^{1}$ Following completion of the survey, teachers received additional screening questions to determine their eligibility, interest, and availability to participate in our discussion groups.

