



Educating Students who Attended Quarantine School in 2021-22 due to Covid-19: Challenges, Successes, and Lessons Learned for Creating a Sustainable, Short-term Virtual Learning Program

Molly Schlesinger, PhD
Senior Research Associate

Adrienne Reitano, PhD
Director, Strategic Planning

Joy Lesnick, PhD
Deputy Chief

Hannah Ingersoll,
Associate, Strategic Analytics

Office of Research and
Evaluation

March 2023

Key Findings

- During the 2021-22 school year, over 4,400 unique students attended Quarantine School for at least one day while quarantining as a result of Covid-19. *This does not include students who attended their in-person school virtually if their school went virtual in winter or who did not attend school while quarantining.*
- Students who attended Quarantine School stayed for three school days on average throughout the 2021-22 year.
- Observations revealed that Quarantine School can be a positive experience for students if class sizes are small and if teachers are active, encourage student interaction, and provide concrete visuals to help students follow along.
- Parents and guardians offered suggestions including:
 - Increasing communication with families and staff.
 - Providing different policies for students who are symptomatic and for those who are asymptomatic.
 - Virtually joining or finishing work from in-person school.
 - Limiting class sizes, improving teacher training, and aligning the curriculum to the District curriculum.

Table of Contents

Quarantine School.....	5
Establishing sustainable continuity of academic programming.....	5
Joining Quarantine School.....	6
Quarantine School chain of communication and responsibilities.....	6
Staffing and daily structure.....	8
Attendance.....	9
Research Questions.....	10
Data Used for this Analysis.....	10
Enrollment and Attendance.....	10
Observations.....	10
Surveys.....	10
Interviews.....	11
Quarantine School Attendance.....	11
How many students attended Quarantine School each school calendar day throughout the 2021-22 year?.....	11
Box 1: Days quarantining vs days attending.....	11
Quarantine School Virtual Classrooms.....	14
Some teachers used techniques such as screen sharing and reinforcing the lesson in multiple media formats to keep students engaged and active.....	15
Other times, teachers may have missed opportunities to use techniques to support student success in a virtual environment.....	16
Based on Quarantine School observations, recommendations for high quality virtual instruction include having multiple engaged teachers, screen sharing, and variation to encourage student activity and engagement.....	17
Student, parent, and teacher experiences with Quarantine School.....	18
Student Survey.....	18
Around half of students started attending Quarantine School the next school day after they found out they needed to attend Quarantine School and were assigned work to complete by their regular, in-person school teacher.....	18
About 30% of students agreed or strongly agreed the Quarantine School lessons felt similar to what they were learning in their regular, in-person school, about 40% thought the lessons were interesting, and about 50% reported learning something during the Quarantine School lessons.....	19

About half of students agreed or strongly agreed the independent work assigned during Quarantine School felt similar to what they were learning in their regular, in-person school, the independent work was interesting, and they learned something from the independent work assigned during Quarantine School..... 20

Students recommended increasing the amount of interaction they had with other students and providing work or having better alignment between the Quarantine School curriculum and students’ regular, in-person school curriculum..... 21

Parent/Guardian Survey..... 22

 About 60% of parents or guardians who responded to the survey found out their student needed to attend Quarantine School from an adult at their students’ school, and about 30% of students started attending Quarantine School the next school day after they found out they needed to attend..... 22

 About 50% of parents or guardians agreed or strongly agreed they knew who to contact when they had questions about Quarantine School and were satisfied with the response they received..... 23

 Less than 40% agreed or strongly agreed the independent work assigned during Quarantine School felt similar to what students were learning in their regular, in-person school before they had to quarantine..... 23

Parent and guardian open ended feedback 25

 Parents and guardians explained the value of Quarantine School..... 25

 Parents and guardians provided constructive criticisms and recommendations to improve Quarantine School and activities while quarantining..... 25

Teacher Interviews 28

 Teachers recommended increased communications, adaptable curriculum, and supportive co-teaching to better support individual student learning needs. 29

Recommendations..... 30

Conclusions 32

 Lessons Learned for Creating a Sustainable Remote Learning Program 33

Tables

Table 1. Responsibilities of regular, in person school and Quarantine School staff for students’ attending Quarantine School 7

Table 2. Grades K-8 Quarantine School full day classroom schedule 9

Table 3. Grades 9-12 Quarantine School full day classroom schedule..... 9

Table 4. Number of students and average numbers of days quarantining, number of students who attended for at least one day, and average number of days attending Quarantine School, by 2021-22 timeframes..... 14

Table 5. Number of observations by classroom..... 14
 Table 6. Number of observations by class subject..... 14
 Table 7. Number of students in attendance per classroom observation..... 15

Figures

Figure 1. Chain of communication and responsibilities of students’ regular, in-person school staff, students, and Quarantine School staff in the communication chain 8
 Figure 2. The number of students enrolled (blue) and attending (green) in Quarantine School daily 12
 Figure 3. How much do you agree with the following statements about the morning lessons with the whole class? 19
 Figure 4. How much do you agree with the following about the assignments for the independent work time? 20
 Figure 5. How much do you agree with the following statements? 233
 Figure 6. Thinking about your child’s experience in Quarantine School support this school year, how would you describe the following?..... 24
 Figure 7. Process for ELs or students with IEPs to receive support during Quarantine School..... 24
 Figure 8. Intended Process for ELs or students with IEPs to receive support during Quarantine School..... 29

Acknowledgements

The authors would like to acknowledge the contributions of Wajibah Thompson and Amani Fields from the Office of Academic Supports for leading the Quarantine School efforts, and all of the Quarantine School teachers and long-term substitutes. The authors also thank Helena Pylvainen and Jenny Hoedeman-Eiteljorg in the Office of Research and Evaluation for proofreading and editing.

Quarantine School

In the 2021-22 school year, the School District of Philadelphia (SDP) created a fully virtual Quarantine School for SDP students who needed to quarantine at home due to the Covid-19 pandemic. The goal of Quarantine School was to support students who temporarily could not attend school in person so they did not fall behind their classmates.

When students tested positive for Covid-19 or were determined to have been in close contact with someone who tested positive, they quarantined at home until they could safely return to school in person. When the need for quarantine was determined, schools completed a form that was shared with Quarantine School staff as a way to “enroll” students in Quarantine School. Quarantine School was mainly used for cases where individual students were quarantined, but not whole classes or schools. When whole classes or schools spent time in virtual instruction, students were not typically assigned to Quarantine School.

Establishing sustainable continuity of academic programming

The primary goal of Quarantine School during the 2021-22 school year was to support students who could not attend school in person due to Covid-19. A second goal of the first year of Quarantine School was to create a sustainable model for continuity of academic programming for students who were temporarily unable to attend school in person due to Covid-19 exposure or illness, other illness, or challenges such as pregnancy or caring for young children. SDP, like much of the country, experienced phases of both District-wide and school-wide virtual learning during 2019-20, 2020-21, and 2021-22 due to the Covid-19 pandemic and learned through experience about the best practices for virtual schooling, and the challenges of providing high quality virtual learning.

The Quarantine School approach to maintaining continuity of academic programming faced some challenges. When full schools, grade levels, or classrooms were virtual, students were in a virtual space with the same teacher(s) they would work with in person or in the physical classroom. By contrast, Quarantine School brought together a handful (and sometimes hundreds) of students from different schools and grades into a few virtual classrooms, and the students in the virtual classroom typically did not know each other or the teachers at first. Students might have also been at different learning levels or different places in the District-wide curriculum. Another key challenge was that students visited Quarantine School for as few as one day to as many as 21 days at a time, and potentially multiple times per year. Quarantine School was built around students joining for a few days and returning to their home school in person soon after, and class rosters were rarely the same one day to the next. Even the best, fully staffed, and well planned out system will experience extreme challenges when it is designed for new students to show up daily for different numbers of days.

Joining Quarantine School

When a student tested positive for Covid-19 (or had a Covid-19 exposure), a school leader completed a Student Support Request Form, and the Office of Academic Supports (OAS) assigned a Quarantine School teacher or virtual classroom to the student. A welcome letter, with a Google Classroom link, Google Meets link, and class schedule was sent by the OAS designee (usually a program manager) to the parent (if a parent email address was provided), the student's SDP email address, and the school administrator who was listed in the Student Support Request Form. If the request was submitted prior to 2pm, the welcome letter and materials were delivered between 2-4pm on the day of the request; otherwise, they were sent between 2pm-4pm the following school day. This analysis does not include students who quarantined along with their entire classroom, grade level, or school; those students engaged in virtual learning with their regular, in-person classroom teachers and classmates and were not expected to attend Quarantine School.

Quarantine School chain of communication and responsibilities

During Quarantine School, students were expected to complete asynchronous work provided by their regular, in-person classroom teachers (or school) and participate in synchronous lessons led by Quarantine School teachers (Table 1). As described later in this report, not all regular, in-person¹ teachers knew to or were able to provide asynchronous work to their students.

Quarantine School synchronous instruction was intended to follow the District-wide Curriculum Units and Quarters-at-a-Glance Academic Framework to ensure alignment with the students' regular, in-person classroom teacher or course structure (Table 1).² Quarantine School teachers had access to online core materials supplied by OAS in order to provide instruction aligned to the core materials and in-person instruction as best as possible, and were directed to use Google Drive, Google Meet, and Google Classroom platforms for instruction. As described later, classrooms contained students in more than one grade level, and therefore by definition, Quarantine School synchronous instruction could not follow the grade level specific District-wide Curriculum Units and Quarters-at-a-Glance Academic Framework for all students in the Quarantine School classroom.

Quarantine School teachers were also expected to collaborate with Quarantine School English for Speakers of Other Languages (ESOL) teachers and Special Education teachers to implement strategies, accommodations, and modifications for students (Table 1). As described later, Quarantine School teachers were prepared to support English Learners (ELs) or students with IEPs, but could not provide support if they were not informed that students were entitled to the additional support.

¹ This term will be used throughout to refer to the school where students are enrolled during the school year when they are not quarantining, as well as the school's classes and teachers.

² For more information on the Academic Framework, see: <https://www.philasd.org/academics/wp-content/uploads/sites/860/2021/08/The-Academic-Framework-.pdf>

Table 1. Responsibilities of regular, in person school and Quarantine School staff for students attending Quarantine School

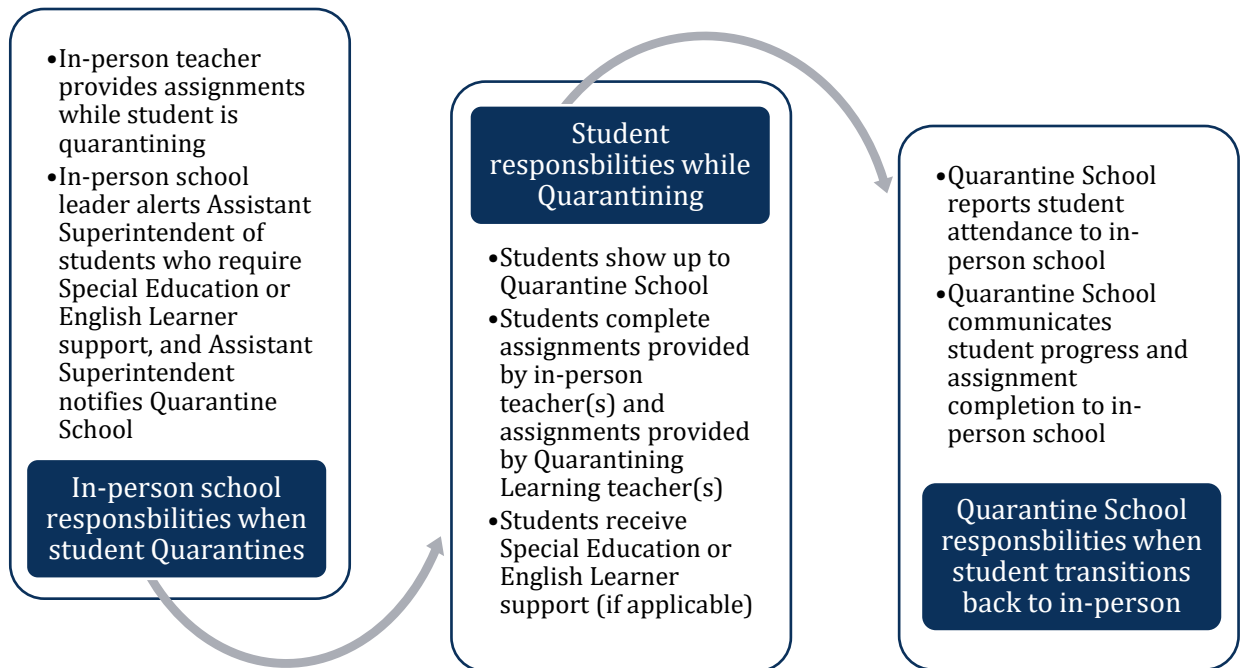
Responsibility	Who assigns work to students?	Who makes sure students complete assignments in QS?	What if a student has an IEP or is an EL?
In-Person School	In-person teachers provide assignments for students to complete asynchronously	QS teachers support students as they complete activities or homework assigned by in-person school	In-person school leaders alert AS, AS alerts QS
Quarantine School	Quarantine School teachers lead synchronous lessons for all students	QS teaches to District-wide Curriculum Units Academic Framework activities	QS provides IEP and EL support in collaboration with ESOL and Special Education teachers

Note: QS refers to Quarantine School, AS refers to Assistant Superintendent, IEP refers to Individualized Education Plan (for students entitled to Special Education support), EL refers to English Learners, and ESOL refers to English for Speakers of Other Languages.

The Quarantine School model was designed around a specific communication process, outlined in Figure 1. School leaders were instructed to communicate with the students’ regular, in-person school teachers about the students assigned to Quarantine School, and then the students’ regular, in-person school course teachers were expected to provide work for students who were attending Quarantine School to the student and Quarantine School teacher. The students’ regular, in-person school leaders were instructed to reach out to their assistant superintendent for students who required additional services (e.g., ESOL, Special Education).

Quarantine School teachers were expected to support students in understanding the objectives and tasks, teaching content from the lessons outlined in the Units and Quarters-at-a-Glance. Quarantine School staff were also responsible for ensuring the tasks assigned by the students’ regular, in-person course teachers were completed by the student, and for communicating progress to the students’ regular, in-person course teachers. It was the responsibility of the Quarantine School teachers to share Quarantine School Daily Progress Reports with the students’ regular, in-person school designee to confirm assignment completion, progress, and participation.

Figure 1. Chain of communication and responsibilities of students' regular, in-person school staff, students, and Quarantine School staff in the communication chain



Staffing and daily structure

There were 24 teaching positions, two project management positions, one secretary position, and one principal position allocated for Quarantine School. Nineteen (19) of the teaching positions were filled at different points throughout the school year, with most teachers starting in Winter or Spring 2022 and only five starting in late Fall (November or December) 2021. Of the 19 positions, nine were filled by full-time teachers and 10 were filled by long-term substitutes from Kelly Educational Staffing (the substitute teaching provider to SDP during the 2021-22 school year). Typically, two Quarantine School teachers were assigned per classroom and would divide the subjects between them. For example, one teacher would lead ELA, and the other teacher would lead Music or Art immediately after, or one teacher would lead ELA and Social Studies, and the other teacher would lead Math and Science. Additional substitutes, ESOL, and Special Education teachers would join classrooms as requested to provide additional support to students.

Classrooms were organized with students from multiple grade levels (grades K-1, 2-3, 4-5, 6-8, and 9-12), and Quarantine School teachers were expected to follow a consistent schedule (Tables 2-3). Students received lessons in 3-4 core subjects per day and 1-2 “specials” (e.g., Music, Art, etc.) daily. Typically, the hour-long ELA and Math blocks would be split into synchronous and asynchronous time, usually about 30 minutes each. During the synchronous time, the teacher would often teach a lesson to the class, or the students would complete a worksheet and review the answers as a group. During the asynchronous time, students would remain in the online classroom but work independently on assignments from the in-person school teacher, or if they had no assignments from their in-person school, they would engage in an online adaptive program like Freckle or iReady.

Table 2. Grades K-8 Quarantine School full day classroom schedule

Time	Course/Support for K-1	Course/Support for 3-8
8:25-8:55	Morning Meeting	Morning Meeting
9:00-10:00	ELA	ELA
10:05-10:50	Music for students, Prep for Staff	Art or Music for students, Prep for Staff
10:55-11:55	Math	Math
12:00-12:45	Lunch	Lunch
12:50-1:20	Science or Social Studies	Science
1:25-1:55	Art	Social Studies
2:00-2:54	Office Hours/Individualized Support	Office Hours/Individualized Support

Source: Quarantine School Google Classroom K-1, 6-8

Table 3. Grades 9-12 Quarantine School full day classroom schedule

Time	Course/Support
8:15-8:45	Morning Meeting
8:50-9:50	ELA
9:55-10:40	Prep/Individualized Completion of Tasks
10:45-11:45	Math
11:50-12:20	Lunch
12:25-12:55	Science
1:00-1:30	Social Studies
1:35-3:19	Office Hours/Individualized Support

Source: Quarantine School Google Classroom 9-12

Attendance

A student was considered present if they attend at least one period of Quarantine School. If students enrolled in Quarantine School had Covid-19 symptoms or another illness that precluded attendance in Quarantine School, parents were expected to contact the in-person school.³

Administratively, attendance records had to be entered by the in-person school of record. Therefore, for a student to be considered present in the District’s administrative records, communication between the Quarantine School and in-person school was necessary. In practice, it was the responsibility of the OAS designee (usually the program manager) to communicate with the student’s regular, in-person school secretary about whether the student was present or absent (Figure 1). The school secretary (or a person in a comparable position) would reconcile student attendance from absent to “quarantine-received instruction,” ensuring that students’ school attendance records incorporated their Quarantine School participation, and students would not have an absence while on District-directed quarantine.

³ Based on the results of the parent survey, parents did not know they were expected to contact the in-person school if their student was too sick to participate in Quarantine School.

Research Questions

Three research questions are the focus of this report:

1. How long did students attend Quarantine School on average? How many students attended?
2. What occurred in Quarantine School virtual classrooms?
3. How did students, parents, and teachers feel about Quarantine School?

Data Used for this Analysis

To answer the research questions, we collected data via administrative records, observations, interviews, and surveys.

Enrollment and Attendance

During the 2021-22 school year, Quarantine School staff tracked *quarantining*—or enrollment in Quarantine School—and attendance in Quarantine School via Google Sheets. The quarantining sheet included the student name, grade level, student SDP ID, home school, and the expected length of the quarantine⁴ on one Google Sheet tab for each date of the academic year. The attendance sheet included separate tabs for K-3, 4-8, and 9-12 attendance. Each sheet included the student name, grade level, student SDP ID, home school, expected length of the quarantine, start date, exit date,⁵ and places to record attendance for all dates⁶ between the start date and exit date.⁷ Demographic data for students in either file were collected from the SDP data warehouse.⁸ This analysis does not include students who quarantined along with their entire classroom, grade level, or school, as those students engaged in virtual learning with their regular, in-person classroom teachers and classmates and were not expected to attend Quarantine School.

Observations

The Office of Research and Evaluation (ORE) members observed 35 Quarantining School lessons or classes. Seventeen observations occurred in March, and 18 occurred in April and early May 2022. ORE employees developed a protocol to assist in taking notes during classroom visits.

Surveys

ORE administered surveys to students and parents/guardians in spring of the 2021-22 school year. Both surveys asked students and their parents/guardians about the logistics of registering in

⁴ Typically, students were expected to quarantine for 10 days in the beginning of the school year. As state, local, and district policies changed throughout the 2021-22 year, the number of quarantine days was adjusted to account for students' exposures, symptoms, vaccination status, and positive tests. As of April 2022, the number of days students are quarantined ranged from 5-21 days.

⁵ The *exit date* was calculated using a formula adding the *expected length of the quarantine* to the *start date*.

⁶ This was inclusive of all weekends and holidays during or in between the *start date* and *exit date*.

⁷ Due to record keeping challenges, attendance data was not consistent, and we are not confident in its accuracy from September 1 to October 31, 2021.

⁸ Demographic data was sourced from Qlik Enrollment Snapshots - October 1, 2021. For any students who were not enrolled in SDP on October 1, 2021, demographic data was pulled from Qlik Total Student Enrollment Yearly during the 2021-22 year.

Quarantine School, the relevance of the synchronous whole class activities and independent work assignments, and the transition back to in-person school. The surveys were open from March 14 – June 6, and were sent to students and families who were newly enrolled in Quarantine School each week during this period, as well as to students and families who had participated in Quarantine School earlier in the year. Reminders were sent in April and May to parents/guardians who had not yet responded. Thirty-two (32) students and 536 parents/guardians provided survey responses between March and June 2022.

Interviews

In April 2022, ORE staff invited all Quarantine School teachers to participate in structured interviews to describe their experience. Three teachers agreed to be interviewed, and those interviews took place in June 2022. The interviewed teachers had started teaching in Quarantine School in 2022 (and had not taught in Quarantine School in fall 2021).

Quarantine School Attendance

How many students attended Quarantine School each school calendar day throughout the 2021-22 year?

During the 2021-22 school year, over 11,700 unique students were referred to Quarantine School⁹ and spent time quarantining as a result of Covid-19. Of those, more than 4,400 unique students attended Quarantine School for at least one day during the 2021-22 school year. This analysis does not include students who quarantined along with their entire classroom, grade level, or school, as those students engaged in virtual learning with their regular, in-person classroom teachers and classmates, and thus were not referred to Quarantine School. See Box 1 for more information about number of days quarantining and number of days attending.

Box 1: Days quarantining vs days attending

For this report, the number of days students quarantined represented the number of actual days students were designated to quarantine according to administrative records and includes weekends and holidays. The number of days students attended Quarantine School represents only the days that Quarantine School was open and students attended (e.g., students did not attend Quarantine School on a Saturday, even though they were quarantining on a Saturday).

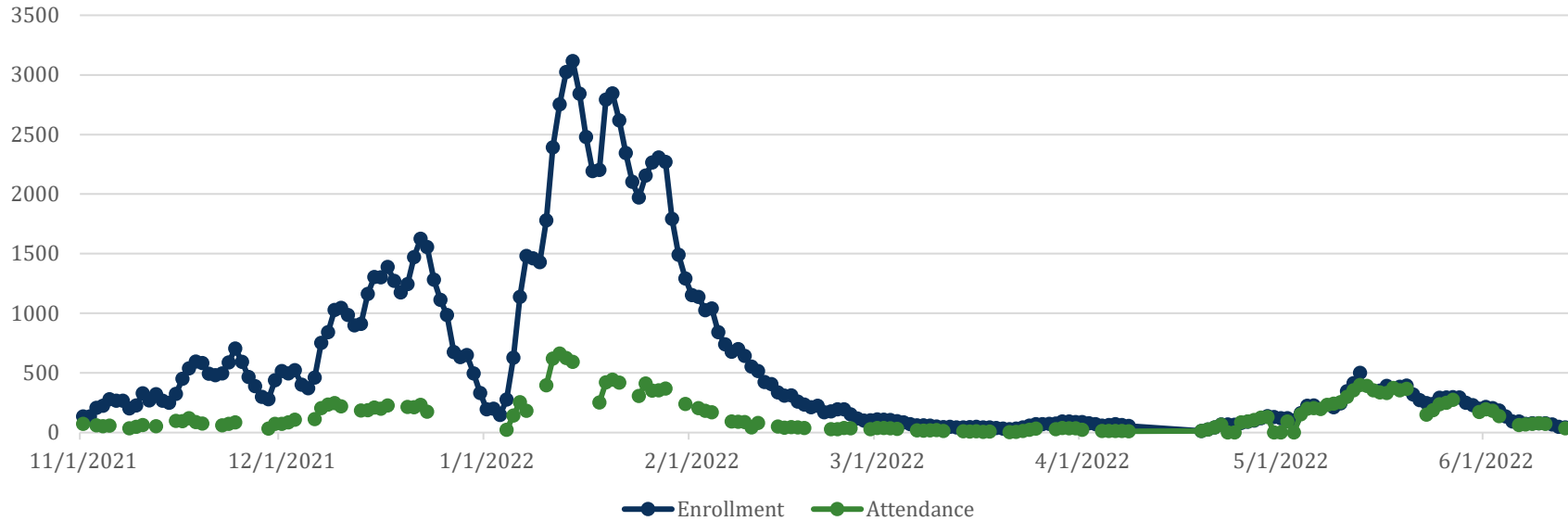
Due to days quarantined representing the number of actual days student were quarantined, and not the number of school calendar days that students were not attending their home school, it was expected that *average number of days attended* would not be similar to *average number of days quarantining*.

Accounting for weekends, holidays, taking true sick days to recover from Covid-19 symptoms, and time it took for students who were sent home to quarantine to gain access to Quarantine School, we anticipated that on average, for students who were quarantined for 10 days, they would only be eligible to attend five days of Quarantine School.

⁹ Students for whom a school leader completed a Student Support Request Form because the student was exposed to or tested positive for Covid-19.

Daily numbers of students quarantining grew steadily from November, peaking in January (the height of the Omicron surge), declined to fewer than 200 students by March, and increased again in mid-May, following spring break (Figure 2).¹⁰ Daily Quarantine School attendance hovered below 300 students until mid-January, when it peaked to over 500 students, steadily declined until late February, and increased again in mid-May to about 300 students on average.

Figure 2. The number of students quarantining (blue) and attending (green) in Quarantine School daily



Source: Enrollment data provided by Quarantine School via the Extensive Quarantine Student Academic Google Sheet and attendance data provided by Quarantine School via the Master QL Attendance Google Sheet. Downloaded June 14, 2022.

Notes: Students are counted multiple times as long as they were enrolled or attended multiple days.

How to read this figure: This figure represents the total number of unique students quarantining (blue) and the total number of unique students who attended Quarantine School (green) daily. The markers correspond to the number daily, and the lines connect the markers. The blank spaces between the markers for attendance (green) represent times school was closed; for example, SDP was not open from December 24, 2021 through January 1, 2022 due to winter break. Quarantining days (blue) do not have spaces between the markers when school was not in session because students were considered continuously quarantining until they were officially allowed to return to their home school even if school was not open.

¹⁰ This analysis does not include students who quarantined along with their entire classroom, grade level, or school, as those students engaged in virtual learning with their regular, in-person classroom teachers and classmates and thus were not expected to attend Quarantine School.

How many students were enrolled in and attended Quarantine School, and what was the average length of enrollment and attendance?

The number of *quarantining students* who were referred to Quarantine School¹¹ varied considerably over the course of the school year. About 1,300 students had their first day of quarantine at any point between November 1 to November 30, 2021 (Table 4). About 2,800 students had their first day of quarantine at any point from December 1 to December 23 (the last day of school before winter break). Over 5,000 students had their first day of quarantine from January 3 to January 31, 2022 during the height of the Omicron surge in Philadelphia. Fewer than 750 students had their first day of quarantine from February 1 to April 8 (the last day of school before spring break). Just under 1,000 students had their first day of quarantine from April 19 to June 13 (the last day of school) (Table 4).

The proportion of quarantining students who were referred to Quarantine School who *attended at least one day of Quarantine School* increased somewhat in January, then increased again between April and June. Between November 2021 and April 8, about a third of students who were referred to Quarantine School and quarantining *attended Quarantine School for at least one day*, whereas over half of referred students *attended Quarantine School for at least one day* between April 19 and June 13, 2022.

The *average number of days quarantining* was fairly consistent from November through December at 9.3 – 10.0 days, and jumped slightly from January through April, with an average of about 11.6 days. Additionally, the *average number of days students attended Quarantine School* followed a consistent pattern, with an average of about 3.1 – 3.4 days from November through January, with a slight increase to 4.1 days from February to April, and a decline to 3.7 days from late April to June.

¹¹ Students for whom a school leader completed a Student Support Request Form. When an entire class, grade, or school were quarantined, and the students regular, in-person school of record taught students virtually during the quarantine period are not included in this number.

Table 4. Number of students and average numbers of days quarantining, number of students who attended Quarantine School for at least one day, and average number of days attending, by 2021-22 timeframes

Timeframes	Number of students quarantining	Average number of days quarantining	Number of students who attended at least one day	Average number of days attended
November 1 – 30, 2021	1,319	9.34	437	3.05
December 1 – 23, 2021	2,801	10.01	866	3.41
January 3 – 31, 2022	5,419	11.63	2,191	3.42
February 1 – April 8, 2022	749	11.57	240	4.10
April 19 – June 13, 2022	944	10.51	573	3.65

Source: Data provided by Quarantine School via the Extensive Quarantine Student Academic Google Sheet and the Master QL Attendance Google Sheet. Downloaded June 14, 2022.

Notes: The Omicron surges occurred between December 2021 and February 2022. April 8 was the last day of school prior to spring break. April 19 was the first day of school after spring break. This table is based on the date students were first enrolled in Quarantine School per quarantine period; some student enrollments may have crossed timeframes.

Quarantine School Virtual Classrooms

ORE conducted 35 observations to describe what occurred in Quarantine School classrooms. The majority of observations occurred during Reading/ELA in grades 4-5 or 6-8 classrooms, and included 10 or fewer students (Table 5).

Table 5. Number of observations by classroom

Grade Level	Number of Observations
K-1	5
2-3	5
4-5	10
6-8	12
9-12	3

Source: Quarantine School Observation Sheet, accessed May 26, 2022.

Nearly all subject areas were observed, with the majority of observations in Reading/ELA or Math courses (Table 6).

Table 6. Number of observations by class subject

Class Subject	Number of Observations
Art	4
Math	9
Morning Meeting	1
Music	1
Reading/ELA	12
Science	3
Social Studies	5

Source: Quarantine School Observation Sheet, accessed May 26, 2022.

More than half (21) of the observed classes had 10 or fewer students in attendance, whereas 14 observations had more than 17 students present (Table 7).

Table 7. Number of students in attendance per classroom observation

Number of Students	Number of Observations
1	7
2-3	8
5-10	6
17-20	6
27-29	4
39-40	4

Source: Quarantine School Observation Sheet, accessed May 26, 2022.

The observers took detailed notes about how teachers engaged students in learning online, how teachers differentiated instruction in an online environment, how students demonstrated learning or mastery of the content, and any challenges.

Some teachers used techniques such as screen sharing and reinforcing the lesson in multiple media formats to keep students engaged and active.

We observed two techniques that kept students engaged and active. First, some teachers supported their students virtually by having students independently complete electronic worksheets on their computers, while the teacher would screen share the same worksheet to students. This technique most often occurred in math, but occasionally in other subjects as well. Particularly for the younger grades, teachers would read the questions on the worksheet that was screen-shared and students would volunteer (or be called on) to answer the question on the teacher's screen. The teacher would then type or draw the correct answer to each question, allowing all students to see the correct answer in real time on the teacher's screen. This allowed students who were struggling with the lesson to watch how other students were solving the problems or answering the questions. For older grades, students would typically be given a few minutes to complete the worksheet independently before coming back together as a group to check their work and have the teacher or other students explain how to solve the problems using screen share. This practice was noted in eight observations (about one in five).

A second technique that kept students engaged and active was that teachers would present the same information in multiple media formats, or build on an initial lesson by adding supplementary information in different media types. For example, one lesson started out with a history lecture, followed by a video that included more detailed information about names and dates, and then students independently read a one-page essay or text book chapter on the same topic. Within 30 minutes, the topic was reinforced enough times that students were able to write a few paragraphs on the topic. The lecture sometimes included a Q&A portion, in which the students sounded happy and excited to learn more. An additional benefit to this type of lesson is that the activity would switch every few minutes, while keeping the content consistent, and this quicker pacing kept students focused. This technique was noted in three observations (about one in 12).

Another engagement technique included playing videos that were about 3-5 minutes long, and teachers would pause the video every 20-30 seconds to ask students a question about the video. During these experiences, the goal would be for students to watch the video carefully and make connections between the video and other parts of the lesson, or engage in critical thinking about the video content. In a practical sense, this type of activity is equivalent to an interactive lecture with a video instead of the teacher lecturing. This activity was observed twice (about one in 17).

Other times, teachers may have missed opportunities to use techniques to support student success in a virtual environment.

One example of such a missed opportunity we observed was when students completed electronic worksheets independently and reviewed the answers with the whole class, but the teacher did not screen share the worksheet (and neither did the students). Students were called on to answer the questions on the worksheet, but the students struggled to follow along because they were only looking at people's faces (or icons) and did not know which question they were being asked about. The teacher was frustrated that students were unable to answer the questions, and expressed disappointment in students not following along or paying attention. This occurred in three observations (about one in 12).

Additionally, when teachers played videos for the entire length of a lesson (as opposed to a five-minute video or pausing a video every minute to ask questions) students did not appear engaged. Although observers were unable to determine whether students were paying attention (especially if their cameras were off), observers noted that students were not asked any questions or given an opportunity to engage with the video content, and students did not complete a relevant assignment to measure learning of any kind. Lessons in which students watched a video without any interaction felt less engaging than interactive lessons, according to researchers observing the class. Students were able to take a much more passive role. This was noted in two observations (about one in 17).

When students were having difficulty navigating the online environment, and the students were unable to understand or apply the teachers' instructions, other students would shout out suggestions. In these situations, other students called out directions using different, more familiar terms than the teachers used, and the struggling students understood the directions from the other students. This was noted in two observations (about one in 17).

Quarantine School in theory was designed to have multiple teachers in a virtual classroom, who would each lead specific subjects. When one teacher taught a given subject, another teacher was supposed to reinforce positive behaviors and handle administrative work. This practice could be particularly useful when there were technical or administrative issues, because one teacher could continue lecturing while the other teacher could resolve the issue. Although multiple teachers were present in nearly all observations, this technique of collaborative teamwork was noted in only two observations (about one in 17).

Based on Quarantine School observations, recommendations for high quality virtual instruction include having multiple engaged teachers, screen sharing, and variation to encourage student activity and engagement.

Based on the observations, below are list of recommendations to encourage student learning and engagement in a virtual environment.

- **Multiple engaged teachers are needed to support a well-managed virtual classroom environment.** When possible, there should be multiple teachers actively working in each virtual classroom: one leading the lesson and one reinforcing learning, running breakout rooms, or dealing with technical issues, administrative work, or misbehavior. We did not observe it to be helpful to the primary teacher or to the students when a second teacher was present but on mute with their camera off.
- **Screen sharing promotes student engagement.** We observed that students were much more engaged when teachers shared their screen so that all students could follow along, especially when students had trouble navigating online. Home environments are distracting, especially when students have Covid-19 symptoms, and even the most attentive student can lose track of the lesson or classroom activity if there is a distraction at home. The smallest visual cue can keep students focused on the lesson even in a semi-chaotic home environment. For example, teachers shared their screens even during morning meetings (usually a schedule) and lunch (usually a timer) so that students would have visual cues if they were not sure what they were supposed to be doing.
- **Actively engage virtual students.** Every 30-minute lesson should encourage some form of interaction, even if it is students typing an answer into the chat. Providing opportunities for engagement can further support students' attention and learning. Sitting less actively in front of a screen for hours is a challenge for anyone, and providing encouragement for interaction can increase motivation and focus.
- **Varying activities and formats can help keep students' attention.** Lessons in which students were the most actively engaged switched activities about every five to 10 minutes depending on the age group, even if the topic continued for the full 30-minute lesson. This variation can be as simple as transitioning from a lecture to a five-minute video to a Q&A on the same topic, or starting with a welcome math problem, introducing a new topic in a short slide deck, or transitioning to students solving math problems independently based on the slide deck.

Student, parent, and teacher experiences with Quarantine School

Three data sources provided insight into how students, parents, and teachers experienced Quarantine School: a student survey, a parent survey, and teacher interviews.

Student Survey

Thirty-two (32) students in grades 3-12 responded to the Quarantine School Student Survey. The majority of respondents (81%) were in grades 9-12. Of students who responded to the survey, students most commonly attended Quarantine School in September and January (60%). The majority (23 respondents) only attended Quarantine School one time, three respondents attended two times, and three respondents attended three or more times. Of students who responded to the survey, 60% attended Quarantine School for 3-9 days, and 27% attended Quarantine School for 10 days or more.

Around half of students started attending Quarantine School the next school day after they found out they needed to attend Quarantine School and were assigned work to complete by their regular, in-person school teacher.

About 40% of students (12 students) who responded to the survey found out they needed to attend Quarantine School from an adult at their school, such as the school nurse or their teacher. Almost half of students (15 students) who responded to the survey started attending Quarantine School the next school day after they found out they needed to attend Quarantine School. Additionally, about 90% of students (29 students) who completed the survey reported that they knew how to log into Quarantine School on the first day they were supposed to attend.

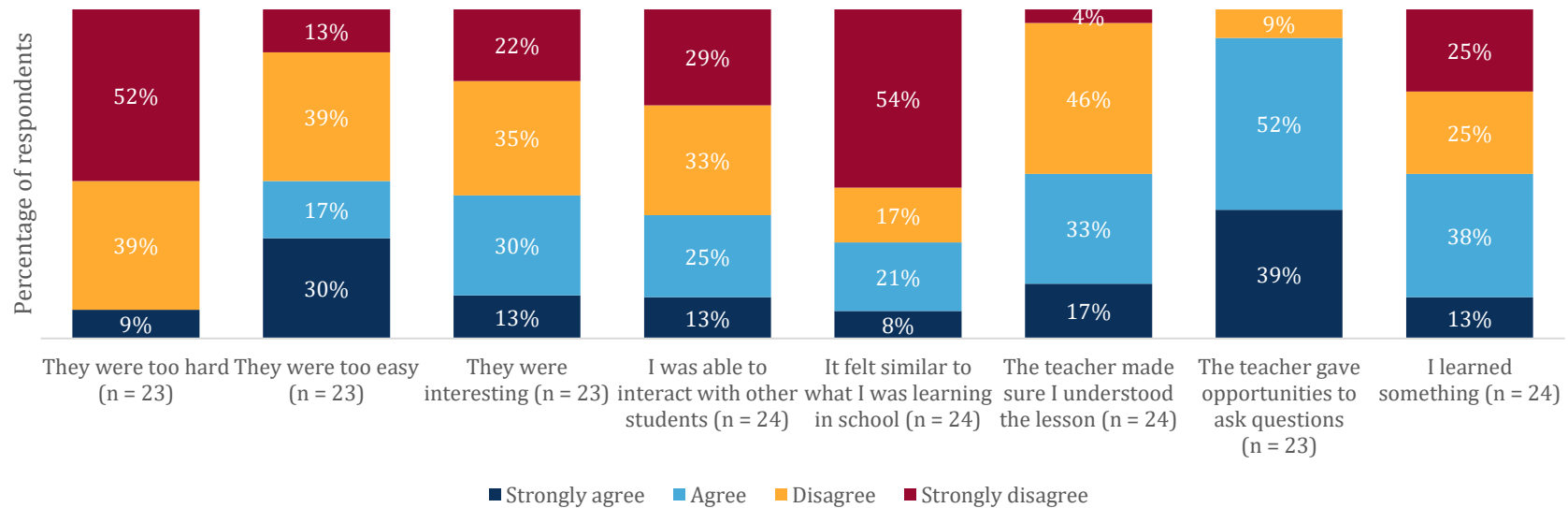
About 60% of students (19 students) who responded to the survey said they were assigned work to complete by their regular, in-person school teacher or another adult from their school. In comparison, about 25% were assigned work to complete by their Quarantine School teacher, and about 8% were assigned work to complete by their Quarantine School teacher and regular, in-person school teacher.

Altogether, this paints a picture that survey respondents had inconsistent experiences in terms of learning that they needed to attend Quarantine School, starting Quarantine School, and receiving work during their quarantine.

About 30% of students agreed or strongly agreed the Quarantine School lessons felt similar to what they were learning in their regular, in-person school, about 40% thought the lessons were interesting, and about 50% reported learning something during the Quarantine School lessons.

When asked about Quarantine School lessons with the whole class, few (9%) respondents agreed or strongly agreed that they were too hard, and almost half (48%) of student respondents agreed or strongly agreed that lessons were too easy (Figure 3). Some respondents agreed or strongly agreed that the lessons were interesting (43%) and that they were able to interact with other students (38%). About a third (29%) of respondents agreed or strongly agreed that the lessons felt similar to what they were learning in school. Half of respondents agreed or strongly agreed that the teacher made sure they understood the lesson and that they learned something.

Figure 3. How much do you agree with the following statements about the morning lessons with the whole class?



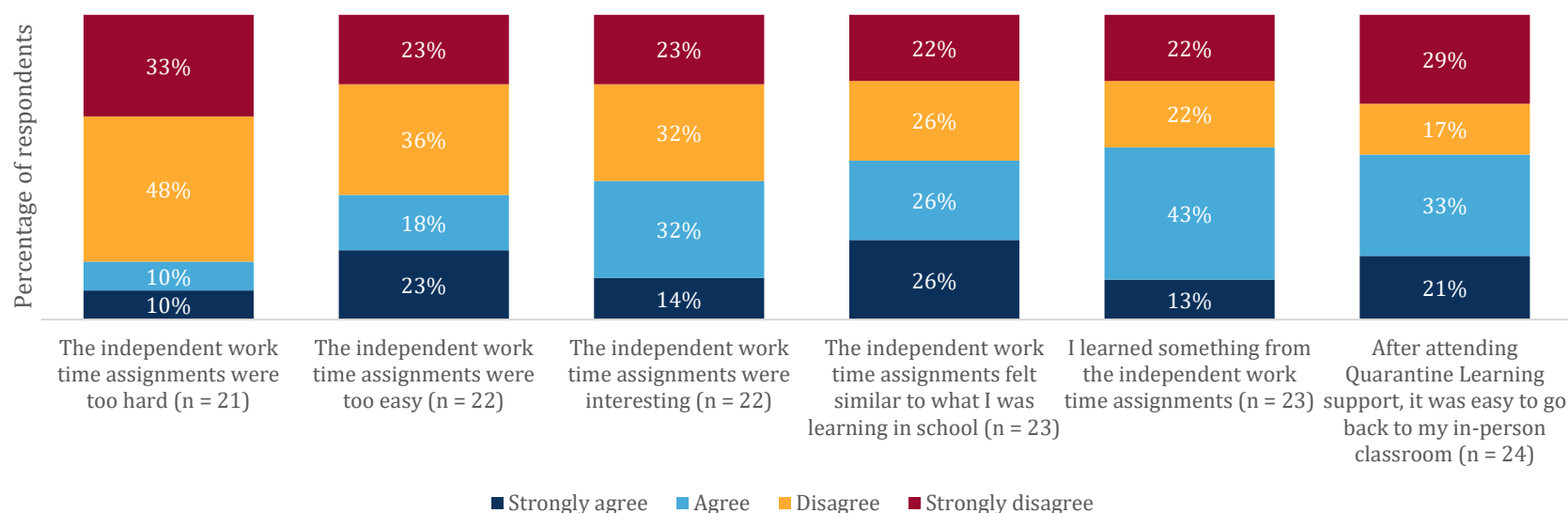
Source: Data from the Student Quarantine School Survey in SurveyMonkey, data downloaded June 14, 2022.

Note: Due to rounding, some of the columns appear to sum to slightly more than 100%.

About half of students agreed or strongly agreed the independent work assigned during Quarantine School felt similar to what they were learning in their regular, in-person school, the independent work was interesting, and they learned something from the independent work assigned during Quarantine School.

When asked about Quarantine School independent work time, about 20% of respondents (6 students) agreed or strongly agreed that the assignments were too hard, about 40% (11 students) agreed or strongly agreed that the assignments were too easy, and about 45% (14 students) agreed or strongly agreed that the assignments were interesting (Figure 4). A slightly higher percentage of respondents agreed or strongly agreed that the assignments felt similar to what they were learning in school (52%).

Figure 4. How much do you agree with the following about the assignments for the independent work time?



Source: Data from the Student Quarantine School Survey in SurveyMonkey, data downloaded June 14, 2022.

Note: Due to rounding, some of the columns appear to sum to slightly more than 100%.

About 65% of students (21 students) who responded to the survey felt like they missed some or a lot of in-person school while in Quarantine School. About half of students felt really or somewhat prepared to return to in-person school. About half of students felt it was a little or not at all easy to go back to in-person classrooms after Quarantine School, which aligns with about half of respondents feeling it was easy to return to their in-person classroom (Figure 4).

Students recommended increasing the amount of interaction they had with other students and providing work or having better alignment between the Quarantine School curriculum and students' regular, in-person school curriculum.

Students answered open-ended questions about their experience in Quarantine School. Six students described how they felt like they were falling behind or had trouble catching up when they returned to their in-person classroom.

Students were asked what could have helped students feel more prepared to return to in-person classroom. Responses included:

- Attending in-person school instead of virtual school (n = 3)
- Recording and posting recorded lessons (n = 2)
- Aligning lessons better with in-person curriculum (n = 2)
- Quarantine School teachers providing work that could help students learn (n = 1)
- Quarantine School teachers communicating more clearly about assignments (n = 1)

Students were asked the best thing about Quarantine School. Responses included:

- The flexibility of being home, such as not wearing a mask or having independent time (n = 7)
- The breaks that helped reduce burnout or screen fatigue (n = 4)
- Nice and supportive teachers (n = 2)
- The work being easy (n = 1)
- The art class (n = 1)

Students were asked how to improve Quarantine School. Responses included:

- Provide more opportunities for students to interact with each other (n = 4)
- Provide work that students can learn from or applies to their in-person class grades (n = 2)
- Have in-person teachers send lesson plans or curriculum to the Quarantine School teachers so students can keep up with their in-person class (n = 1)
- Allow students to virtually visit their in-person class instead of Quarantine School (n = 1)
- Offer daily testing and returning to in-person school rather than attending Quarantine School (n = 1)
- Give students time to be sick and not have to attend Quarantine School until symptoms lessened enough to be able to focus on virtual learning (n = 1)
- Excuse work from the in-person class while in Quarantine School (assuming the in-person work is not provided to student or Quarantine School teacher), especially if the student is feeling sick (n = 1)

Parent/Guardian Survey

Another source of information was the Quarantine School Parent/Guardian Survey. Over 5,000 (n = 5,536) parents/guardians were emailed the Quarantine School Parent/Guardian Survey if their student had been enrolled in Quarantine School, and 536 parents and guardians of students who attended Quarantine School responded to the Quarantine School Parent/Guardian Survey, for a 10% response rate. Nearly 80% of respondents had students in elementary school.

Of parents or guardians who responded to the survey, their students most commonly attended Quarantine School in January (n = 255). Additionally, 68% of respondents' students only attended Quarantine School one time, 21% of respondents' students attended two times, and 11% of respondents' students attended three or more times. About half (53%) of parents or guardians who responded to the survey reported their students attended Quarantine School for 3-9.

About 60% of parents or guardians who responded to the survey found out their student needed to attend Quarantine School from an adult at their students' school, and about 30% of students started attending Quarantine School the next school day after they found out they needed to attend.

About 60% of respondents found out their student needed to attend Quarantine School from an adult at their school, such as the school nurse or their students' teacher. About 30% of respondents found out from a letter or email sent to them or their home.

About 30% of parents or guardians reported that their students started attending Quarantine School the next school day after they found out they needed to attend. About 40% of students started attending Quarantine School one to two school days after they found out they needed to attend.

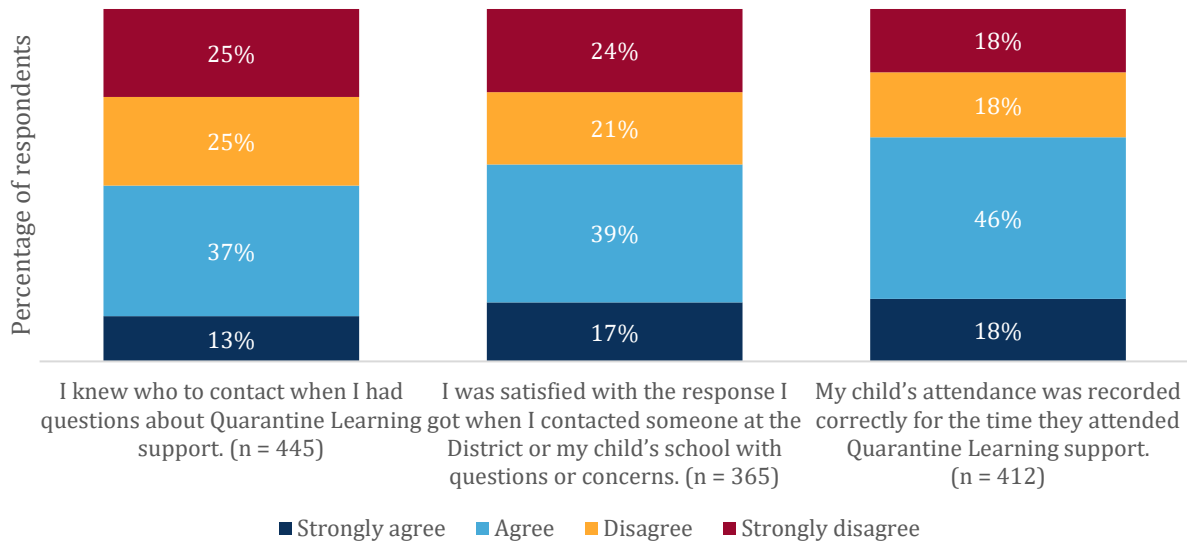
Additionally, about 65% of parents or guardians reported that their students knew how to log onto Quarantine School on the first day they were supposed to attend.

In terms of communication, 56% of parents or guardians indicated they did not receive enough communication from the District about Quarantine School, compared to 2% who received too much and 42% who thought they got just the right amount of communication.

About 50% of parents or guardians agreed or strongly agreed they knew who to contact when they had questions about Quarantine School and were satisfied with the response they received.

About half of respondents agreed or strongly agreed that they knew who to contact when they had questions about Quarantine School support, and they were satisfied with the response they got when they contacted someone with questions or concerns (Figure 5). About 60% of respondents agreed or strongly agreed that their child’s attendance was recorded correctly for the time they attended Quarantine School.¹²

Figure 5. How much do you agree with the following statements about Quarantine School logistics?



Source: Data from the Student Quarantine School Survey in SurveyMonkey, data downloaded June 14, 2022.
Note: Due to rounding, some of the columns appear to sum to slightly more than 100%.

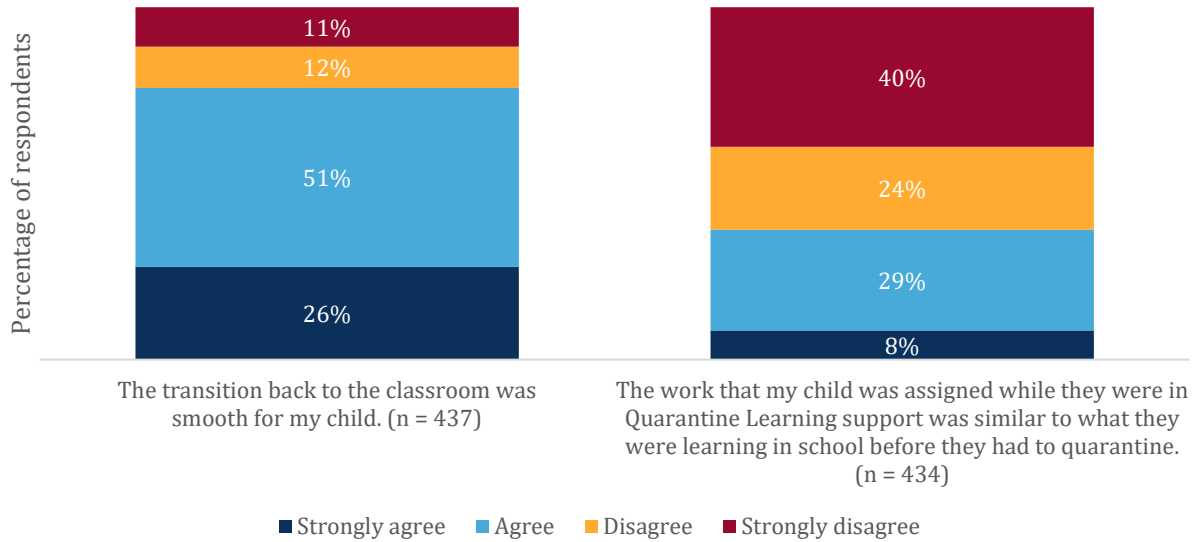
Less than 40% agreed or strongly agreed the independent work assigned during Quarantine School felt similar to what students were learning in their regular, in-person school before they had to quarantine.

About 80% of respondents agreed or strongly agreed that the transition back to the classroom was smooth for their child, although only about 40% of respondents agreed or strongly agreed that the work that their child was assigned while they were in Quarantine School was similar to what they were learning in school before they had to quarantine (Figure 6).

When asked if their child felt prepared for their classes when they returned in-person, just over half of respondents (56%) believed that their students felt somewhat or really prepared.

¹² Correctly refers to whether their students’ attendance in their District attendance records was reconciled to remove any absences.

Figure 6. How much do you agree with the following statements about student transitions and learning content?

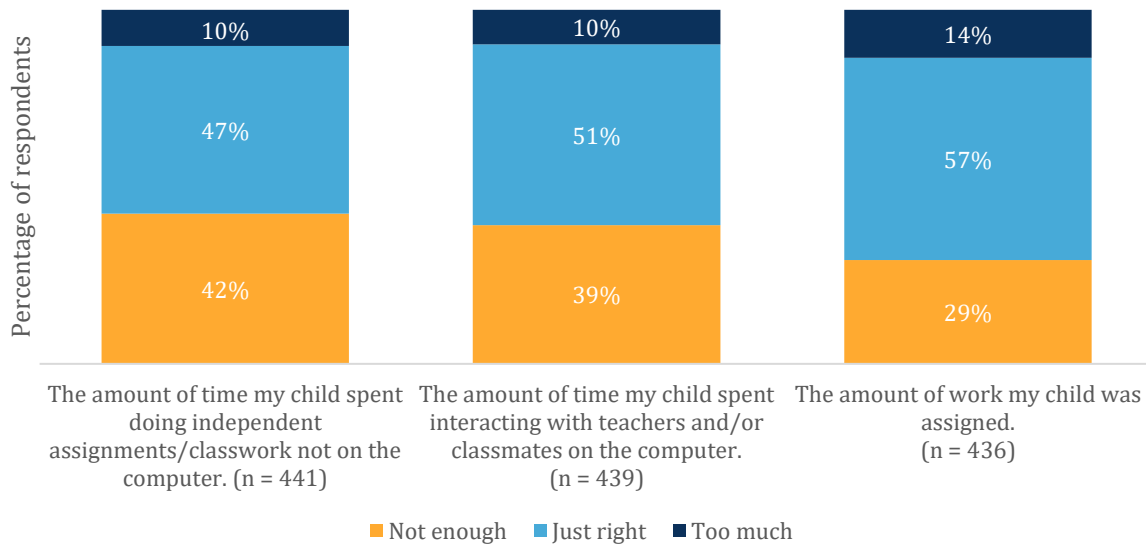


Source: Data from the Student Quarantine School Survey in SurveyMonkey, data downloaded June 14, 2022.

Note: Due to rounding, some of the columns appear to sum to slightly more than 100%.

About half of respondents believed their child spent just the right amount of time completing independent assignments and interacting with teachers or classmates. Over half of respondents felt their child was assigned just enough work (Figure 7).

Figure 7. Thinking about your child’s experience in Quarantine School support this school year, how would you describe the following?



Source: Data from the Student Quarantine School Survey in SurveyMonkey, data downloaded June 14, 2022.

Note: Due to rounding, some of the columns appear to sum to slightly more than 100%.

Parent and guardian open ended feedback

Parents and guardians answered open-ended questions about how Quarantine School could have helped their students feel more prepared, the best thing about Quarantine School, and how to improve Quarantine School for students and their families. This section summarizes common responses to all open-ended questions together because 1) many respondents answered multiple open-ended questions by discussing the same topic, even when the topic was not relevant to the question, and 2) many respondents provided similar responses across questions.

Parents and guardians explained the value of Quarantine School.

Just over 200 comments described the aspects parents liked best about Quarantine School. Some respondents commented on how much they liked the teachers, including how teachers were understanding if students were feeling sick and provided one-on-one support to students (n = 42), and reported that teachers provided engaging lessons (n = 8).

Other respondents indicated that even if they were not completely satisfied with Quarantine School, they were happy with having the opportunity for their students to have continuity of instruction from regular, in-person school to Quarantine School (n = 26), have continuous connection with teachers and other students while quarantining that lessened social isolation (n = 14), keep a routine or structure while quarantining (n = 11), and stay busy during quarantine (n = 8), which helped with the transition back to regular, in-person school (n = 2). Similarly, some respondents were glad Quarantine School allowed their students to be home and safe (n = 19), to get credit for attendance while being quarantined (n = 7), and to have the benefits of being home, such as eating during class or not wearing a mask (n = 4).

A few respondents reported that they were glad students could complete asynchronous work that did not stress out students (n = 12), could engage in fun activities like art during Quarantine School (n = 7), and could participate in small groups or have one-on-one support (n = 5).

Parents and guardians provided constructive criticisms and recommendations to improve Quarantine School and activities while quarantining.

Overall, 805 comments were critical or gave recommendations to improve Quarantine School. Recommendations included a desire to replace Quarantine School with a way to virtually join students' regular in-person classrooms or complete asynchronous offline work from students' in-person school, or if Quarantine School continues as is, to increase interaction, limit class sizes, improve teacher training, and align the curriculum to the District curriculum. Regardless of respondents' opinions about the learning model available to students during quarantine, respondents emphasized the need to increase and streamline communication in all aspects of Quarantine School or during the time students are quarantining.

Class sizes were too big.

Many respondents expressed concerns with the number of students in virtual classrooms, especially during the height of the Omicron surge in January. Recommendations included reducing class sizes (n = 71), utilizing breakout rooms or giving students one-on-one attention and support (n = 16), and hiring more teachers (n = 11). A few respondents also noted the Quarantine School

teachers did a fantastic job managing classrooms with upwards of 80 students, but were unhappy that their students did not learn much during those days (n = 5), especially as sometimes up to an hour was spent taking attendance (n = 20). A couple of respondents also emphasized the need to keep grade levels separate, or at least ensure students were assigned to the correct classroom for their grade (n = 8).

There was not clear alignment between Quarantine School and District-wide curriculum.

Many respondents were frustrated by the lack of alignment between Quarantine School and in-person lessons, and explicitly that Quarantine School did not appear to follow grade-level curriculum (n = 115). Some respondents would have preferred a process for students to virtually enter their in-person classrooms, such as a hybrid projection that allows students to virtually follow along with their in-person classes; even with challenges that come with a hybrid in-class set up, respondents believed following along with their regular classes would be preferable to joining a new class that was teaching different material (n = 37). In lieu of virtually joining students' in-person classes, some respondents described preferring that their students' regular, in-person classroom teacher or school send home a packet of assignments and lessons to complete offline or asynchronously while quarantining, and perhaps having their regular, in-person classroom teachers check in with them once a week (n = 37). A few families requested such assignments when their students' regular, in-person school did not provide them, and students completed those assignments independently at home instead of attending Quarantine School (n = 16). Parents and guardians described that often, but not always, students who received work that was requested from their regular, in-person teacher completed that work instead of attending Quarantine School virtually; these students kept up with their in-person peers and had a smoother transition back to the in-person classroom, but did not receive the attendance credit that other students who attended Quarantine School received.

Clarify expectations about assignments to avoid confusion and too much work.

A few respondents described concern and confusion about whether students were supposed to complete work assigned by their regular, in-person school or the work provided by the Quarantine School teachers, or both (n = 12). In those circumstances, students were tasked with completing double the amount of work than if they were attending school in-person as usual (n = 9). For students planning to complete work assigned by Quarantine School teachers, there were circumstances in which the assignments were not posted in an accessible location, and a few respondents recommended assignments always be posted to Google Classroom (n = 7). A couple of respondents also recommended students be assigned more asynchronous work offline to reduce screen fatigue or allow for flexibility (n = 6).

Review the instructional approaches and technology used in Quarantine School classrooms.

Some respondents recommended that Quarantine School should engage and interact with students more, as students spent too much time required to be muted or watching videos (n = 16). Some respondents also suggested Quarantine School could be improved by increasing synchronous hours to support more learning (n = 11). In contrast, families of younger learners recommended fewer synchronous hours per day, as younger learners struggled to navigate the technology and sit in front of a screen all day with a lack of activity and interaction (n = 16).

Critically, respondents felt that Quarantine School was not appropriately organized to support students with special needs. Providing one-to-one support was the most often recommended solution, but other parents noted that not all students with special needs are comfortable with a virtual environment, and this population should be given special consideration for alternative education methods while quarantining (n = 24).

Some respondents voiced complaints about teachers. Respondents left vague comments about ensuring teachers are better trained and prepared, especially with co-teaching and supporting their fellow teacher, as well as with navigating technology and classroom management in a virtual environment (n = 30). Respondents also described examples in which teachers were explicitly rude to students, kicking students out of the classroom for not coming off mute quickly enough, threatening to punish students, making fun of the behavior of a student with special needs when they did not know the students had special needs, refusing to allow students to use virtual backgrounds, and being generally impatient and unsympathetic to students (n = 15).

A few respondents also noted technology issues, including receiving broken links, being unable to find links or information, or experiencing general difficulty navigating an unfamiliar virtual environment, and they recommended solutions such as including an IT contact for parents (who answers or calls parents back), providing an easily accessible location with all links and login information, ensuring students have their own working computers, and providing a solution so that teachers can see all students on-screen at once or at least see hands being raised (n = 18).

Address student wellbeing and the challenge of transitioning to in-person learning.

Some respondents described how attending Quarantine School resulted in student confusion, anxiety, stress, and being often overwhelmed in virtual classrooms with 30 or more students and teachers struggling with classroom management or providing mixed messages about assignments (n = 16). Respondents also described the same feelings of anxiety, stress, and being overwhelmed for students when struggling to transition back to in-person school when they missed a lot of assignments and lessons. Additionally, respondents explained how their students fell behind in their regular, in-person school, their grades suffered, they failed tests, and they missed assignments because they were not given the opportunity to keep up with their in-person school work while quarantining (n = 22).

Improve communication.

Some respondents emphasized the need for better communication and coordination between Quarantine School and in-person teachers and staff in order to provide assignments aligned with District-wide curriculum or provide a seamless transition between Quarantine School and returning to regular, in-person school (n = 19). Some students who attended Quarantine School were marked absent for regular, in-person school due to the lack of communication and coordination between Quarantine School staff and regular, in-person school staff (n = 5). Additionally, numerous respondents noted the need for better communication from the District and Quarantine School staff about Quarantine School policies and notifications about enrolling in Quarantine School to students, parents, and families (n = 40).

Numerous respondents requested more timely communication with parents and students in general, and specifically about when and how to start Quarantine School, expectations for student participation and parent support, locating classroom links and daily schedules, and when students were supposed to return to their in-person school (n = 41). A few respondents were frustrated that the correct daily schedule was not posted publicly, and some preferred the schedules be consistent across grades for homes with multiple students in Quarantine School (n = 12). Respondents described concerns about the delay between their student testing positive for Covid-19 and finding out they needed to attend Quarantine School or receiving the links to log into Quarantine School, and they preferred their students be able to start within 24 hours (n = 12). A couple of respondents indicated their students were unable to attend at all due to not receiving the notification or not having the links to log in (n = 6). These respondents recommended an onboarding packet with Quarantine School staff contact information and easy access to links and login information.

Policy transformations.

Beyond their experience with Quarantine School, respondents also provided feedback about the quarantining policy itself. For example, some respondents indicated that they preferred students take Covid-19 tests regularly if they were asymptomatic so they could go to in-person school rather than Quarantine School, and other respondents argued the District quarantine policies were not aligned to federal Covid-19 safety standards (n = 10). Additionally, while some students attended Quarantine School because they were exposed or tested positive but had no symptoms of Covid-19, other students were very sick, and respondents noted there should be different policies in place for students who were sick and unable to participate in Quarantine School, similar to when a student is suffering from the flu (n = 10); respondents recommended making these policies transparent and accessible to parents and guardians.

Teacher Interviews

An additional source of feedback about Quarantine School were interviews with Quarantine School teachers. In April 2022, we invited all Quarantine School teachers to participate in structured interviews to describe their experience. Three teachers agreed to participate and were interviewed in June 2022. In the interviews, teachers were asked about their background, their path to joining Quarantine School, QS-provided training and support, typical QS days, preparing lessons, communication, challenges, celebrations, and recommendations to improve the experience. The following section describes the key themes that emerged from these interviews.

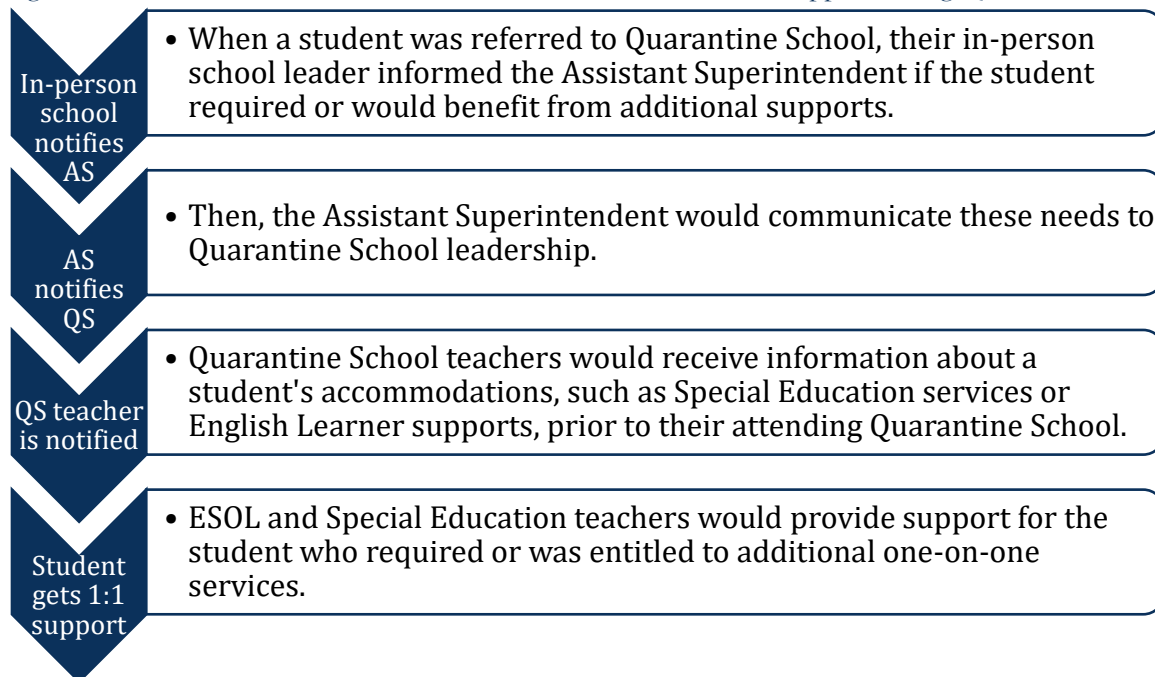
Generally, teachers reported challenges and requested increased and streamlined communications. In addition to constructive criticisms and recommendations, there were some positives expressed in the interviews. One interviewee described both the benefits of trading off subjects and of having a co-teacher and supporting each other throughout the school day.

Teachers recommended increased communications, adaptable curriculum, and supportive co-teaching to better support individual student learning needs.

It was challenging to accommodate—and even to become aware of—individual student learning needs during large Quarantine School classes. According to the *Instructional Expectations during Quarantine* document, when a student was referred to Quarantine School, their in-person school leader was supposed to communicate with the Assistant Superintendent about the students who were participating in Quarantine School who required or would benefit from additional supports (Figure). Then, the Assistant Superintendent was supposed to communicate these needs with Quarantine School leadership. If the process went smoothly, then Quarantine School teachers would receive information about students prior to their attending Quarantine School.

However, this communication process was extremely challenging. One interviewee indicated that no information was provided to Quarantine School teachers about students who required additional one-to-one supports, such as students who received Special Education services or English Learning supports. Although Quarantine School was prepared to support students who required or could benefit from one-to-one supports, they could not provide the support if they were unaware of the students and their needs, and teachers therefore recommended more explicit communication about students with such needs to the Quarantine School program in order for Quarantine School teachers to provide appropriate supports.

Figure 8. Intended Process for ELs or students with IEPs to receive support during Quarantine School



The design of Quarantine School meant that students who were at different learning levels and different points in the curriculum at their regular, in-person school were in the same virtual Quarantine School classroom. One interviewee described that it was difficult to adapt the curriculum for students who found it too challenging.

Recommendations

The following recommendations were developed based on feedback from students and parents/guardians, themes that emerged from classroom observations, topics highlighted in teacher interviews, and conversations with Quarantine School administrative staff.

Daily learning experience

- **Consider offering an alternative to Quarantine School where students virtually join their regular, in-person classrooms or complete asynchronous offline work from their in-person schools.** Parents and guardians described that such a system could give students a better opportunity to keep up with the regular, in-person school curriculum rather than attending Quarantine School as currently designed, even with the logistical challenges that come with virtually joining in-person classrooms or completing offline work without interacting with their regular, in-person teachers while quarantining.
- **Limit class sizes and increase the number of Quarantine School teachers.** Parents and guardians were pleased when their students received small group or one-on-one support, and observations revealed the benefits of small group support. Additionally, by limiting the number of students in a classroom and grouping students by grade, it will be easier for instruction to stay on grade level.
- **Align the Quarantine School curriculum to the District curriculum for a smoother transition for students.** Parents and guardians felt as if Quarantine School did not follow District curriculum, which made it difficult for students to keep up with the lessons being taught in their in-person school during their absence. Although the goal of Quarantine School was to adhere to District-wide curriculum, in practice this proved challenging because grade levels were mixed, students joined Quarantine School at different learning levels, and the students who joined Quarantine School were at different phases of the District curriculum.

Teacher training and support

- **Reinforce and support the implementation of best practices for virtual learning.** This may include providing additional professional learning opportunities for teachers to become more literate in digital tools, using virtual class time effectively (e.g., limiting time spent taking attendance), providing activities to increase student interaction and engagement (e.g., sharing screens and providing students with a visual cue to refocus their attention if they are distracted in the home environment and switching activities frequently to hold students' attention), and ensuring students are learning.¹³ Professional learning opportunities for virtual teachers could also include preparation and strategies for fluctuations or unexpected upticks in the number of students attending Quarantine School during Covid-19 surges, so that teachers can quickly and effectively adjust their lessons and instructional approaches.

¹³ For more information about District-wide exemplars of virtual teaching and learning, see: philasd.org/research/2021/04/13/examples-of-successful-online-instruction-in-ten-schools-fall-2020/

- **Conduct regular observations and coaching sessions with virtual teachers, and select teachers for Quarantine School based on their virtual teaching skills and experience.** Parents and guardians who provided feedback clearly expressed that teachers with effective instructional and virtual classroom management strategies could make up for frustration created by the other logistical challenges of Quarantine School. Parents/guardians also reported that virtual teachers with ineffective instructional and virtual classroom management skills made the required quarantining situation and communication challenges even more frustrating. It could be helpful for teachers to engage in a virtual teaching demonstration during job interviews and receive regular PD in best practices for effective teaching in a virtual setting to address these challenges.

Cohesiveness and relationships between Quarantine School and the regular, in-person school

- **Establish a clear process for teachers from the students' in-person schools to provide assignments for students to complete during Quarantine School.** Students do not have the opportunity to keep up with their regular, in-person school curriculum while quarantining if they are not provided with the material from the regular, in-person school.
- **Consider providing SIS access to Quarantine School teachers and staff.** Rather than sending daily attendance records for in-person school secretaries at each school to reconcile, Quarantine School staff could update attendance records in Student Information System (SIS) records in real time. SIS access would also provide Quarantine School staff with information about student needs or family contact information. The current Google Sheet record-keeping system allows for and resulted in easily created human errors, as well as sheet formula errors for fields that auto-populate, without any accountability or system for noticing or resolving such errors, in addition to any mistakes involved in communicating information to in-person schools.
- **Devote additional attention, staff, and resources to support students' mental health and wellbeing while quarantining and during the transition back to in-person school.** Survey respondents described that students experienced stress, anxiety, and confusion during Quarantine School, and there were major impacts on student wellbeing and success during the transition back to in-person school. Policies and support to help students transition back to in-person school could reduce student anxiety and stress about catching up with missed work and the embarrassment of falling behind in school during quarantine.

Communications

- **Improve the communication process for notifying families about Quarantine School.** This improved process should allow students to join Quarantine School the next school day after a positive Covid-19 test or exposure and make sure schedules, expectations, links, IT support, and log-ins are easily accessible to families and students on the first day of Quarantine School. Students and families should be notified via multiple platforms (e.g., not just the students' email or not just in the class Dojo) to ensure they know the expectations, how to log-in, and whether they are required to attend Quarantine School at all.

- **Improve communication and coordination between in-person schools and Quarantine School.** Enhancing communication could have many benefits including: increasing the accuracy of in-person school attendance records, providing students with Special Education or English Learner services, and smoothing the transition for students back to regular, in-person school. Based on parent and guardian comments, students' grades and mental health were negatively impacted by the lack of communication between Quarantine School and regular, in-person schools.
- **Implement differentiated policies between students who are ill with Covid-19 and students who are asymptomatic.** Differentiate requirements, expectations, and supports provided to students who are quarantining due to a positive, asymptomatic Covid-19 case or exposure, and students who are sick and have active symptoms that preclude learning. Clarify whether students who are ill should participate in Quarantine School activities or have an excused absence due to illness.
- **Clarify and clearly communicate current policies about quarantining and attending Quarantine School.** For example, do all students need to attend Quarantine School or are there alternative activities to engage in during quarantine? If students are directed by the District to quarantine, will they have unexcused absences during that time? If a student is quarantining, is that student responsible for work assigned or exams assigned to other students in-person while that student is quarantining? How are grades and attendance officially impacted while quarantining or attending Quarantine School? How should students reconcile discrepancies between attendance records if they attended Quarantine School? Should students attend Quarantine School if they are actively sick and recovering from Covid-19?

Conclusions

During the 2021-22 school year, SDP created a fully virtual Quarantine School for SDP students who needed to temporarily quarantine at home due to the Covid-19 pandemic. Part of the goal of the first year of Quarantine School was to explore how to create a sustainable model for continuity of academic programming for students who were temporarily not able to attend school in person due to Covid-19 exposure or illness.

During the 2021-22 school year, over 11,700 unique students were referred to Quarantine School and spent time quarantining as a result of Covid-19. Of those, more than 4,400 unique students attended Quarantine School for at least one day during the 2021-22 school year.¹⁴ Over 5,000 students were referred to Quarantine School, and over 2,000 students attended Quarantine School at the height of the Omicron surge in January. This was a challenging time, with hundreds of students ending up in virtual classrooms at a moment's notice. Overall, Quarantine School adapted as the quarantine rates changed throughout the year, resulting in a positive small-group experience

¹⁴ This analysis did not include students who quarantined along with their entire classroom, grade level, or school, as those students engaged in virtual learning with their regular, in-person classroom teachers and classmates and were not expected to attend Quarantine School.

for a handful of students attending Quarantine School at the end of the 2021-22 school year that was quite different from the experience during the surges.

The Quarantine School model faced many challenges during the rollout year, as students were at different learning levels or areas of the curriculum, students visited Quarantine School for as few as one day to as many as 21 days at a time, and the system was built around students joining for a few days and returning to their regular, in-person school soon after. Parents and guardians generally found Quarantine School challenging, and although some survey respondents were glad it was offered, many would have preferred alternative activities or requirements while their students were quarantining. The most common requests included replacing Quarantine School with a way to virtually join students' regular, in-person classrooms, completing asynchronous offline work from students' in-person school, limiting class sizes, increasing the number of teachers, better aligning the Quarantine School curriculum to the District-wide curriculum, implementing best practices for virtual learning, improving communication, implementing transparent policies, and differentiating between students who are feeling sick and those who are asymptomatic.

Lessons Learned for Creating a Sustainable Remote Learning Program

Even the best, fully staffed, and most carefully planned system will experience extreme challenges when it is designed for new students to show up for a different number of days daily. The Quarantine School program adapted and changed over time to address fluctuation in students, program practices, and staff turnover. When the program began in September 2021, the program itself was being designed as students were testing positive for or exposed to Covid-19 during the first week of school; this included hiring staff, determining daily activities, tracking students, and managing communication. With leadership assigned to design and manage the Quarantine School program also responsible for covering staffing shortages in over 100 District schools, staffing shortages at the Central Office level resulted in a less than desirable situation for Quarantine School in fall 2021. The program solidified when the Quarantine School principal started in October 2021, and the program staff could handle the program's daily operations. During the Omicron surge in December through February, however, far too many students were referred to Quarantine School at once (1,000 – 3,000) for the virtual teachers to manage (200 – 500 students daily between the five classrooms).

After the winter Omicron surge passed, Quarantine School was more manageable, with typically no more than 100 students and as few as five students attending Quarantine School daily across five classrooms. Observations revealed that some, but certainly not all, students attending Quarantine School in March and April were quarantining for 10 to 21 days or more, in classes of about 2-3 students, and the teachers got to know the students and built, albeit temporarily, respected student-teacher relationships. From the researchers' perspectives, these circumstances felt more like a virtual environment created to serve students who would be in the virtual classroom for a sustained period of time. This was reminiscent of when the District was fully virtual and students were with the same teacher(s) and classmates daily in 2020-21, with more continuity than was possible for students who dropped in to Quarantine School for just one or two days while

quarantining.¹⁵ Thus it could be ideal for future iterations of Quarantine School to serve only students who will be attending for a week or longer. This would give students time to get to know their teachers, their classmates, and the expectations, and it would give teachers time to informally assess where the students are in the District’s curriculum and identify ways to adapt the curriculum to accommodate specific student needs.

For the existing Quarantine School model, the classroom observations and the feedback from students, families, and teachers indicated that the experience was not ideal when students dropped in for a day or two or when staff were overwhelmed. However, Quarantine School could be positive when families and teachers received accurate and timely communication, when class sizes were manageable, and when virtual lessons kept students actively engaged in learning activities.

¹⁵ For more information about examples of successful instruction of virtual schools in 2020-21, see: www.philasd.org/research/2021/04/13/examples-of-successful-online-instruction-in-ten-schools-fall-2020