TEACHING AND LEARNING AT 31 SCHOOLS DURING THE COVID-19 PANDEMIC

Jia Wang, Deborah La Torre, Linda F. Adreani, Lauren Kinnard, Seth Leon, David Kikoler, and Elaine Rosales

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Teaching and Learning at 31 Schools During the COVID-19 Pandemic

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Executive Summary

This survey study, conducted by the National Center for Research on Evaluation, Standards, and Student Testing (CRESST) in collaboration with American Education Solutions (AES), intends to provide an initial data-driven understanding of teachers' and students' perspectives on what happened during the 2020–2021 school year in the midst of COVID-19. The survey data was collected from 31 public schools in three states in spring 2021. Twenty-three of the 31 schools are magnet schools that receive funding from the Magnet Schools Assistance Program (MSAP) in the U.S. Department of Education (US ED).

The CRESST team augmented existing student and teacher surveys to incorporate questions about changes to schooling due to the pandemic. Specifically, we asked about the transition from the traditional model of five days of in-person schooling to a hybrid or online model and how this transition affected teaching and learning for both students and teachers. The online surveys were administered to all teachers and students in either Grade 8 or Grade 10 at the participating schools. Students and teachers completed one of two versions of the survey—either an in-person or hybrid/online version depending on their learning/teaching modes for the school year. The questions in the two versions of surveys were either identical or had slightly different wording as was appropriate.

We conducted descriptive analyses based on survey data from 1,660 secondary student responses and 651 teacher responses across the two versions of the survey. Below are the key findings. Findings are structured according to the format of the survey.

Student Survey Descriptive Results

The following presents the descriptive findings for both in-person and hybrid/online teachers who completed the 2021 teacher survey.

Learning Location

The majority of students attended school in either a fully in-person model (37%) or fully online model (38%). However, students also indicated that their classes frequently included students participating in the opposite model (e.g., in-person classes also included online).

Technology

The majority of students in both learning models (63% of in-person; 69% hybrid/online) completed the academic year using school-provided technology with the remaining students reporting they utilized personal hardware (e.g., family laptop, desktop, tablet).

Class-Time Activities

Overall, students in both learning models reported engaging in a variety of class-time activities with in-person students reporting slightly higher rates of group or paired work than the hybrid/online students. The highest percentage of students in all learning models reported working with digital and paper learning materials with hybrid/online students reporting more frequent use of teacher-made digital materials (e.g., videos, lessons, presentations).

Afterschool or Weekend Activities

Overall, the in-person students reported having more interaction with others while learning outside of class time, while the hybrid/online students reported studying more through digital materials.

Academic Commitment

Both in-person and hybrid/online students reported high levels of positive academic self-efficacy, and positive expectations for the future. Both groups also reported that they work hard to do their best at school; however, a higher proportion of hybrid/online students reported having a dedicated time to do homework.

Academic Expectations

Ninety-five percent of the in-person students and 96% of the hybrid/online students reported that they expect to graduate from high school or attend college in the future.

Barriers to Learning and Engagement

Students in both learning models experienced significant and frequent barriers to learning during the 2020–2021 school year. Internet access was a significant barrier for both in-person and online/hybrid students; however, in-person students more frequently reported issues with school supplies. Motivation to engage in schoolwork was reported by a higher proportion of hybrid/online students.

Intergroup Relationships

Overall, students in both in-person and hybrid/online models reported positive beliefs about students from diverse racial and ethnic groups and their relationships with students who are different from them. Interestingly, hybrid/online students scored their schools more highly on racial/ethnic climate and equal treatment of all racial groups than in-person students.

Teacher Survey Descriptive Results

The following presents the descriptive findings for both in-person and hybrid/online teachers who completed the 2021 teacher survey.

Learning Location

Despite identifying a primary model of teaching (i.e., in-person or online/hybrid), the vast majority of teachers reported that they simultaneously taught students in-person and online. That is, whether teachers taught from home or from their school site, they rarely taught classes with all students attending in the same format.

Class-Time Activities

Teachers in both learning models reported utilizing a variety of instructional practices during class-time. A majority (over 70%) of all teachers reported that they made short videos for their students to watch, and that they created prerecorded lessons or other digital materials for students. Hybrid/online teachers and in-person teachers reported engaging students in similar activities; however, hybrid/online teachers reported more frequent use of each activity.

Professional Development Types and Activities

Over half of both in-person and hybrid teachers reported spending 10+ hours collaborating with other teachers and participating in professional development (PD) about integrating technology for learning. Both in-person and online/hybrid teachers were least likely to spend 10+ hours in PD about teaching special student populations and Response to Intervention (RTI).

Perceived Professional Development Outcomes

In-person teachers had positive perceptions of PD outcomes while online/hybrid teachers varied in their perceptions. High proportions of teachers in both models believed they learned to integrate technology to improve instruction.

Teacher Collaboration Activities

Both in-person and hybrid/online teachers reported consistent collaboration with teachers from their school or district. Hybrid/online teachers reported less but similar types of collaboration as inperson teachers.

Student Support

Both in-person and hybrid/online teachers (more than 80% and about 75% respectively) reported weekly to daily focus on student progress toward learning goals. In-person teachers reported more positive perceptions of their effectiveness than hybrid/online teachers. Similarly, a majority of in-person teachers believed their students were engaged during class and coped well with learning during the pandemic while less than half of hybrid/online teachers believed the same about their students.

Barriers to Teaching and Learning

Student-related barriers exceeded technology-related barriers for in-person teachers. In contrast, hybrid/online teachers reported more frequent technology-related issues. Both in-person and hybrid teachers reported pandemic-related barriers to student engagement with more than 90% of both groups reporting that it was frequently difficult to motivate students to take responsibility for their work.

Parent Involvement

Hybrid/online teachers reported higher levels of parent involvement; however, both groups' reports indicate that parental involvement was low for both groups.

Student Integration

Approximately 90% of teachers from both groups reported that their students represented a heterogenous ability mix and that their students represented the racial diversity of their school.

Student Outcome Results: Student Perspectives

We found that the majority of the in-person and hybrid/online students had positive perceptions about their learning. They reported that they either learned about as much (38.2% and 37.8%) or more than before the pandemic (24.6% and 22.0%). To gain additional insight, we used crosstabs to examine the relationship between the perceived positive outcome of teaching and learning during the pandemic and related survey items.

Technology

More than 60% of the in-person students who reported having their own device (64.8%) or a device from school (61.6%) also felt that they learned as much or more than before the pandemic. A majority of the hybrid/online students showed the same relationship, although in this case, results were most similar for those who had a device from school (60.5%) and slightly less similar for those who reported having their own device (56.8%).

Class-Time Activities

Just over half of in-person students who had positive learning perceptions reported using digital or paper learning materials and working in small groups or pairs. About half of hybrid/online students with positive learning perceptions reported frequently engaging with prerecorded lessons or teachermade digital materials (e.g., short videos).

Afterschool or Weekend Activities

Of the students surveyed, 47.1% of in-person students and 45.5% of hybrid/online students reported that they did not participate in tutoring but still had positive learning perceptions. In contrast, only 28.8% of in-person students and 32.8% of hybrid/online students reported that they did not participate in tutoring and had negative learning perceptions during the pandemic.

Barriers to Learning and Engagement

More than half of the students reported that they experienced an individual barrier to their learning but still perceived that they learned as much or more than before the pandemic. More than half of the in-person students and slightly less than half of the hybrid/online students who had positive perceptions of their learning reported at least sometimes having issues with internet access, motivation to do work, or with finding time to do homework because of household responsibilities.

Intergroup Relationships

All but two of the items showed strong positive relationships with both in-person and hybrid/online students' perceptions of learning. The only two intergroup items where less than half of in-person and hybrid/online students reported positive perceptions of learning focused on teachers' use of materials that represent different racial/ethnic backgrounds in class and no single racial/ethnic group being favored over another at their school.

Student Outcome Results: Teacher Perspectives

In contrast to the students, teachers were generally less optimistic about student learning during the 2020–2021 school year. More than half of the in-person teachers (56.6%) and more than three quarters of the hybrid/online teachers (75.2%) reported that their students learned less than they did prior to the pandemic. It should be kept in mind, though, that these and the following results reflect both elementary and secondary school teacher opinions whereas the previous results only reflected those of the secondary students. Thus, comparisons between the two results should be made with caution.

Learning Locations

More than half of the teachers who completed the in-person survey showed a negative relationship wherein they believed that their students learned less than they did before the pandemic, and also reported that they did simultaneous teaching (58.3%) and had at least some of their students attend in person while others attended online (59.1%).

Class-Time Activities

Both in-person and hybrid/online teachers had negative perceptions of student learning despite frequent use of all 12 class activities listed on the survey. Overall, hybrid/online teachers who had negative perceptions of student learning reported higher levels of engagement in these activities than their in-person counterparts.

Professional Development

When looking at in-person teachers' perceived PD outcomes, only one item stood out. Approximately half of in-person teachers had negative perceptions of student learning but agreed or strongly agreed that PD helped them use technology to improve their instruction. In contrast, hybrid/online teachers' PD experiences and perceptions of PD outcomes showed significant

relationships with their perceptions of student learning. Specifically, a pronounced relationship appeared between negative perceptions of student learning and receiving less than 10 hours of different professional development for 11 of the options on the survey. Additionally, more than half of the hybrid/online teachers tended to report that students learned less than before the pandemic but also felt that they experienced positive outcomes from the PD they participated in.

Teacher Collaboration

We found a relationship between hybrid/online teachers' perceptions of student learning and three of the items regarding teacher collaboration. The teachers who had negative perceptions of student learning tended to report (a) discussing ideas about how to improve student engagement during lessons with colleagues, (b) discussing students' social-emotional needs with other teachers/staff, or (c) having regular meetings with other teachers or staff at their school or district.

Student Integration

Both hybrid/online and in-person teachers tended to report negative perceptions of student learning but positive perceptions about their classes representing a heterogenous ability mix (69.5% and 52.5%, respectively) and the students in their classes representing the racial diversity of their school (71.0% and 56.2%, respectively).

Barriers to Teaching and Learning

To conclude, barriers to teaching and learning were related to negative perceptions of student learning for both in-person and online/hybrid teachers. Student participation was reported as the biggest barrier for both groups, but the relationship was more pronounced for hybrid/online teachers than in-person teachers.

Parent Involvement

A direct relationship also seems to be present regarding level of parent involvement and teacher perceptions of student learning. More specifically, those in-person teachers who perceived that their students learned less during the 2020–2021 school year also tended to report that none to half of the parents attended conferences (51.5%), school events (55.1%), or initiated communication to check on their child's progress (54.8%). Similar albeit more pronounced findings were found for the hybrid/online teachers with percentages for each of these items ranging from 57.0% to 71.4%, with the biggest difference between groups of teachers found for attending school events (16.3%).

Summary and Discussion

This study provides early evidence for what it was like teaching and learning during the COVID-19 pandemic. Even though we were not able to randomly assign students and teachers to different modes of learning, because of variations in how the six districts and 31 participating schools in the survey carried out teaching and learning during the 2020–2021 school year, we were able to examine differences at a descriptive level for those who had an in-person versus a hybrid or online only

experience. In addition, we were able to examine whether there was any relationship between perceptions of student learning during the pandemic and the self-reported experiences of the teachers and students.

Limitations and Significance

There are many more COVID-19-related questions that we wanted to include in our 2021 spring surveys. Unfortunately, we were limited in how many COVID-19-related questions we could add as we still needed to cover our MSAP-related questions and we wanted to limit the burden to students and teachers. Therefore, our study is not a dedicated COVID-19 survey study.

There are also many other analyses we could conduct. For example, we could focus on the magnet schools only, the magnet schools with both student and teacher surveys, only on schools with both inperson and hybrid responses, etc. We could also conduct additional analyses to compare student and teacher experiences at the magnet schools and at the non-magnet schools. When time allows, we may return to conduct some or all these analyses.

Additionally, we are now in the process of analyzing a new wave of student and teacher survey data we collected from 15 of the 23 magnet schools in spring 2022. The surveys have overlapping questions with the 2021 spring surveys. For the same schools that participated in both 2021 and 2022 survey administrations, we are analyzing the common questions to see how the experiences of students and teachers have changed or remained the same during the 2021–2022 school year.

COVID-19 changed the lives of K–12 students and teachers dramatically by forcing them to suddenly incorporate online learning and teaching. While there is existing literature on online learning and home schooling, little is known about the impact of changing the model of learning in K–12 public schools from in-person to online or hybrid. This report provides timely insights into teaching and learning during the pandemic from the perspectives of students and teachers at 23 magnet schools and eight non-magnet schools. This study also provides evidence for policymakers and educators of both successes and challenges experienced during the pandemic.

Teaching and Learning at 31 Schools During the COVID-19 Pandemic¹

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Abstract: COVID-19 changed the experiences of K–12 students and teachers in ways that are not yet well documented. This report provides initial insights into teaching and learning during the pandemic from the perspectives of teachers and students at 31 public schools in three states. The analyses indicate that about two thirds of the teachers surveyed thought their students learned less than they had prior to the pandemic. In contrast, the majority of the students surveyed reported that they learned as much as or more than before the pandemic, except for students at one school. Additional analyses should provide valuable information for policymakers and educators on successes and challenges experienced by teachers and students in magnet schools during the pandemic.

Objectives

This study was designed to explore what aspects of teaching and learning were affected by the pandemic and to what extent, and to provide an initial data-driven understanding of teachers' and students' perspectives on what happened during the 2020–2021 school year. With district approval, UCLA's National Center for Research on Evaluation, Standards, and Student Testing (CRESST) and our partner American Education Solutions (AES) developed and embedded COVID-19-related survey questions in our annual survey in spring 2021. We surveyed the secondary students and teachers via Survey Monkey and Qualtrics. In total, students and teachers from 31 schools participated. These 31 schools are located in California, Connecticut, and Florida.

These survey results are one component in a broader research context that includes quantitative studies exploring student performance on end-of-year assessments using quasi-experimental study design. Specifically, we have been working with six district grantees that started to receive Magnet Schools Assistance Program (MSAP) funding from the U.S. Department of Education in October 2017. The goal of the MSAP fund is to develop new magnet schools or significantly revising magnet themes at existing magnet schools (Wang & Herman, 2017).

¹ We want to take the opportunity to thank our six magnet directors for their support and sponsorship of the magnet projects which made this study possible. We also want to thank John McDonald for his continued interest in this study, his detailed review of the report, and his insightful feedback on this report. Lastly, we want to thank Mehr for proofing the numbers, and Joanne Michiuye, Emily Schwank, and Law Casey for the final copyediting and posting of this report.

Our survey results intend to provide insights into teaching and learning during the 2020–2021 school year from the perspectives of teachers and students. Survey questions explore/investigate the following two broad study questions:

- 1. What was teaching like during the pandemic for teachers who were predominantly teaching in person compared to teachers who were teaching in a hybrid model or predominantly remote model? What are the similarities and differences between their experience? Did the experience vary by teacher perception of student learning during the pandemic?
 - a. How were teachers supported? How did teachers support and help their students during the pandemic?
 - b. What professional development training and support did teachers receive during the pandemic? Was the training effective?
- 2. How did secondary students learn during the pandemic? What are the similarities and differences between the students who attended school in person and who attended school in a hybrid model or online model? How did the experience vary by student perception of learning during the pandemic?

Data, Survey Procedure, and Method

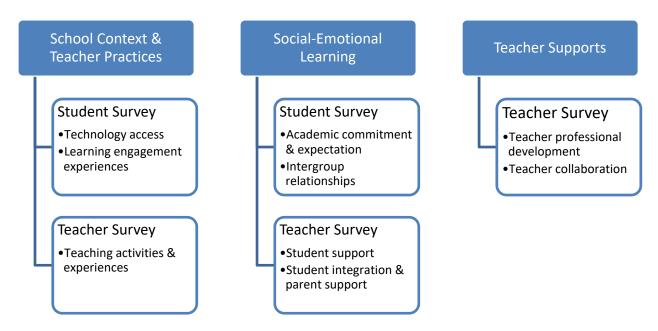
Across the six school district grantees, the magnet school sample included six elementary schools, 13 secondary schools, and four schools spanning both grade levels (Grade 8 and Grade 10). See Appendix Table A1 to view the student makeup for each magnet school including grade span and percentage of African American students, Hispanic/Latino students, and students eligible to receive free or reduced-fee meals. As part of the MSAP grant work, we also surveyed students and teachers at eight non-magnet schools (five elementary schools, one middle school, and two high schools). The non-magnet schools were identified as similar schools to the MSAP-funded schools based on school demographics for surveying. At each surveyed school, all teachers and one full grade of students in Grade 8 or Grade 10 were invited to take the survey.

Survey Development and Constructs

Surveys are an administratively and economically feasible way to measure teacher and student attitudes. As John and Soto (2007) pointed out, unlike outside observers, "individuals are in a good position to report about their psychological processes and characteristics" (p. 481). Prior to the COVID-19 pandemic, we developed and collected annual student and teacher data from the same set of schools (during spring 2018 and 2019). With the districts' approval, we augmented our existing surveys to incorporate questions about changes to schooling due to the pandemic. Specifically, we asked about the transition from the traditional model of 5 days of in-person schooling to a hybrid or online model and how this transition affected teaching and learning for both students and teachers in 2020–2021. That is, rather than simply adding the COVID-10 related questions to the full survey, we replaced a significant portion of the previously developed survey questions with the COVID-19-related questions

Survey instrument development requires the establishment of content validity (Sireci, 1998). For this study, this was achieved in three phases. First, CRESST reviewed the literature and existing surveys that focused on online learning, home schooling, or the pandemic. The CRESST research team and AES then used an iterative process to compile items for three constructs. These constructs are theorized to be important to measure: (a) school context and teacher practices, (b) social-emotional learning, and (c) teacher supports. This resulted in a conceptual framework for this study that can be seen in Figure 1. Next, we conducted a revision process by rewording items, replacing questions, and changing survey response scales to fit the needs and context of our survey. Finally, grantee MSAP directors were asked to provide feedback on the items, after which the CRESST research team and AES made final revisions.

Figure 1
Conceptual Framework for 2021 Student and Teacher Surveys



In the 2020–2021 school year, as a result of COVID-19, school districts across the country offered different learning location models across the school year, taking into account the dynamic health and safety concerns of teachers, students, and families. The options available to families were diverse and at the discretion of the school district; however, in many cases, parents were able to choose which learning location model was best for their child(ren) and were also allowed to switch to different learning models during the school year. Across the six districts in our survey, two districts were 100% remote until the second semester during which they offered two or three days of partial in-person instruction. One district offered an instructional model of five in-person half-days each week for most of the year. The remaining three districts offered full-time in-person instruction most of the school year with full-time remote and hybrid instruction also offered.

To better capture the influence of the learning model on teachers' and students' experiences, we developed two versions of the teacher survey and two versions of student survey: an in-person version and a hybrid/online version. The hybrid/online surveys have a few more questions than the in-person version with the remaining questions either identical or with slightly different wording as appropriate. Students and teachers were directed to either a hybrid/online or in-person version of the survey based on their responses to the learning/teaching model questions.

Survey Administration

After CRESST and AES finalized the survey instruments, they were uploaded online for quality control checks. AES then shared the survey links with magnet directors for distribution to their teachers and students. AES updated the magnet directors at each district on student and teacher survey completion by school and overall, on a weekly basis. One district started their surveys in March and closed out their surveys on April 2. The other five school districts started their surveys in April and closed out in late May to mid-June.

Survey Response Rates

Table 1 presents the student and teacher survey response rates by district and school by whether they were in-person or hybrid/online during the 2020–2021 school year. Additional surveys were submitted by participating schools but are not reflected in the counts or response rates. As can be seen, teachers from all 23 magnet schools and eight comparison schools submitted surveys. Across the two groups of teachers, a total of 460 in-person surveys and 651 hybrid/online surveys were submitted. This constituted an overall response rate of 85% for the teacher surveys, with response rates for the magnet schools at 92% and for the comparison schools at 69%.

Student surveys were also submitted from the 13 magnet schools and three comparison schools that serve Grade 8 and/or Grade 10 students. Across the two groups of students, a total of 980 inperson surveys and 1,660 hybrid/online surveys were submitted. Response rates were somewhat lower than for the teachers with 71% of eligible magnet school students, 42% of eligible comparison school students, and 62% of both groups submitting a survey.

Table 1
Student and Teacher Survey Counts by School and by District

District	School	Secondary students			Elementary/secondary teachers		
		Response rate %	In-person #	Hybrid/ online #	Response rate %	In-person #	Hybrid/ online #
1	Magnet 1				78	0	21
1	Magnet 2	48	0	102	89	0	47
1	Magnet 3	41	0	50	100	0	26
2	Magnet 4				100	0	19
2	Magnet 5				100	0	17
2	Magnet 6				95	1	18
3	Magnet 7	61	158	134	100	86	0
3	Magnet 8	88	189	197	100	81	0
3	Magnet 9	75	236	161	100	99	0
4	Magnet 10				100	4	0
4	Magnet 11	81	38	55	81	47	5
4	Magnet 12	47	32	22	76	29	2
4	Magnet 13	77	26	60	85	48	5
5	Magnet 14	85	47	215	100	1	60
5	Magnet 15	76	29	154	81	2	41
5	Magnet 16	85	42	82	76	1	24
5	Magnet 17	47	9	53	100	1	40
5	Magnet 18				100	0	24
6	Magnet 19				83	1	19
6	Magnet 20				83	0	19
6	Magnet 21				81	0	17
6	Magnet 22				100	0	26
6	Magnet 23	53	4	35	92	0	23
	Subtotal	71	810	1320	92	401	453
1	Comparison 1	13	0	64	25	0	25
2	Comparison 2				100	1	18
2	Comparison 3				90	0	19
2	Comparison 4				100	0	15
3	Comparison 5	59	153	128	70	56	0
5	Comparison 6	70	17	148	86	1	76
5	Comparison 7				95	0	19
6	Comparison 8				100	1	26
	Subtotal	42	170	340	69	59	198
	Total	62	980	1660	85	460	651

Note. Teachers in Districts 3 and 4 offer simultaneous teaching to students attending in person or from home.

Survey Data Analysis Approaches

Survey responses were analyzed using descriptive statistics for multiple-choice items. As previously noted, we administered two versions of the student and teacher surveys in order to assess similarities and differences in experiences for those who were in person during the 2020–2021 school year and those who experienced a hybrid or online only school mode. For the descriptive analyses, we report the number and percentage of respondents who selected different multiple-choice options (see Appendix C and Appendix D for full results). In addition, for the outcome analyses we use crosstabs to examine the relationship between survey responses to participants' perceptions of student learning during the pandemic (see Appendix E and Appendix F for full results).

The internal consistency of the scales included on each survey was also assessed by computing Cronbach's alpha. As shown in Appendix Tables G1 and G2, most of the scales held together well with single constructs with alpha at acceptable (≥ .70) or better levels. The only exceptions included the PD (professional development) Type: Formal and Coaching scale on the teacher surveys (in-person = .60, hybrid/online = .66) and the Afterschool and Weekend Activities (in-person = 0.58, hybrid/online = .58) and Learning Efficacy (hybrid/online = .61) scales on the student surveys.

Next, we present the descriptive survey results for the student and teacher surveys. After this we present outcome results examining the relationship between student and teacher experiences in school and their perceptions of student learning during the pandemic.

Student Descriptive Survey Results

The following presents the descriptive results for the student COVID-19 surveys. This includes results for students who completed the in-person version of the survey as well as those who completed the hybrid/online version. We begin by presenting results regarding school context and teacher practices including technology access and learning engagement experiences. After this we present the results regarding social-emotional learning including academic commitment and expectation and intergroup relationships.

Learning Location

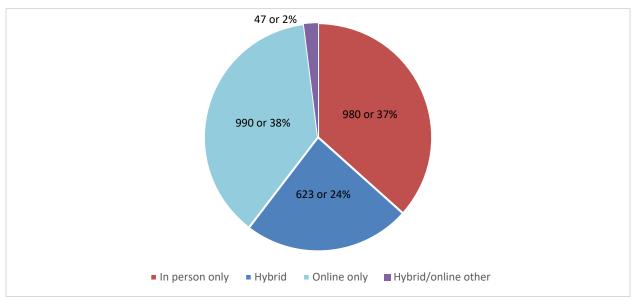
Mode of learning varied across and within the schools that participated in this study. The majority of students attended school in person (37%) or online only (38%). In addition, 24% of students reported attending school in a hybrid mode where they had some in-person instruction and some online learning experiences within a given week. Finally, 2% of students submitted a hybrid/online survey, but did not indicate whether they attended in a hybrid or online only mode (see Figure 2).

Classes were also sometimes structured in a format where the teacher and some of the students were in person at the school while other students attended simultaneously from home. Ninety percent of the in-person students reported that their classes included students attending in person and online at least once a week, with 50% reporting that it was an everyday or almost everyday occurrence. Results

were similar for the hybrid/online students, with 40% reporting that this happened a few times per week and 43% reporting that it was an everyday or almost everyday occurrence.

Overall, the majority of students attended school in either a fully in-person model (37%) or fully online model (38%). However, students also indicated that their classes frequently included students participating in the opposite model (e.g., in-person classes also included online).

Figure 2
Student Reported Mode of Learning

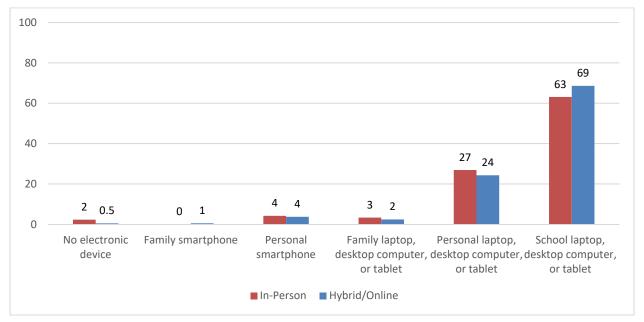


Note. An additional 47 students completed the hybrid/online survey but did not indicate whether they attended school in an online only or hybrid mode.

Technology

Since students were being asked to learn through various modes, it was important to explore the students' access to technology hardware (see Figure 3). Overall, schools played an important role in technology access, with 63% of in-person students and 69% of hybrid/online students reporting that their school gave or lent them a laptop, desktop computer, or tablet to use for their homework and/or schoolwork. Most of the other in-person and hybrid/online students reported that they had a laptop, desktop computer, or tablet that they could use. Very few students reported that they used a smartphone, a family member's laptop, desktop computer, or tablet, or had no access to an electronic device. Thus, the majority of students in both learning models (63% of in-person; 69% hybrid/online) completed the academic year using school-provided technology with the remaining students reporting they utilized personal hardware (e.g., family laptop, desktop, tablet).

Figure 3
Student Access to Technology for Schoolwork or Homework



Class-Time Activities

In-Person Students

A moderate to large percentage of the students who completed the in-person survey reported that their teachers used the different techniques listed on the survey a few times during a typical week or every day/almost every day (see Figure 4). Students who attended school solely in person participated in multiple traditional instructional practices that promoted discourse, including small group or paired work, and peer feedback on projects or homework. The largest percentages of students in all learning modes reported working on digital or paper textbooks, workbooks, or worksheets.

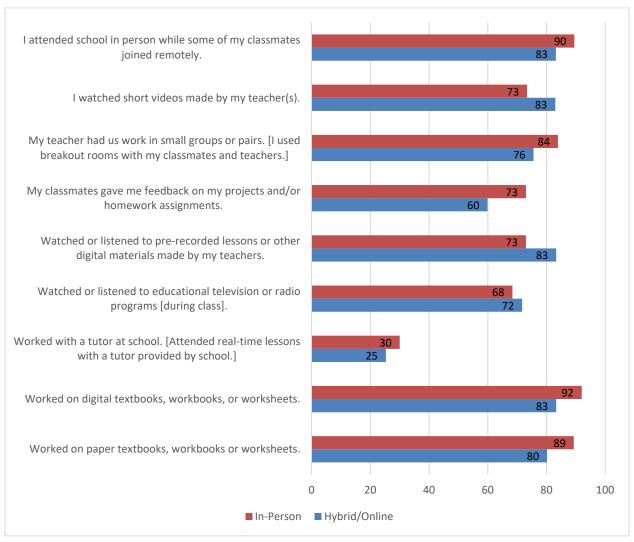
Hybrid/Online Students

Students who attended school in a hybrid/online mode also reported that their teachers used a variety of the different instructional activities and techniques listed on the survey. This included slightly greater use of teacher-made short videos and prerecorded lessons/materials as well as external digital materials such as educational television/radio, or online materials from sources such as Khan Academy or Coursera. In addition, comparatively smaller percentages reported experiencing breakout rooms with classmates and teachers to support group work and receiving peer feedback on projects or homework.

Overall, students in both learning models reported engaging in a variety of class-time activities with in-person students reporting slightly higher rates of group or paired work than the hybrid/online students. The highest percentage of students in all learning models reported working with digital and

paper learning materials with hybrid/online students reporting more frequent use of teacher-made digital materials (e.g., videos, lessons, presentations).

Figure 4
Student Reports of Their Weekly Exposure to Class-Time Activities



Afterschool or Weekend Activities

In-Person Students

When looking at activities that took place outside of normal class time, students who completed the in-person survey were more likely to report studying with people they knew rather than receiving external supports from tutors (see Figure 5). Specifically, 43% to 68% of these students reported that

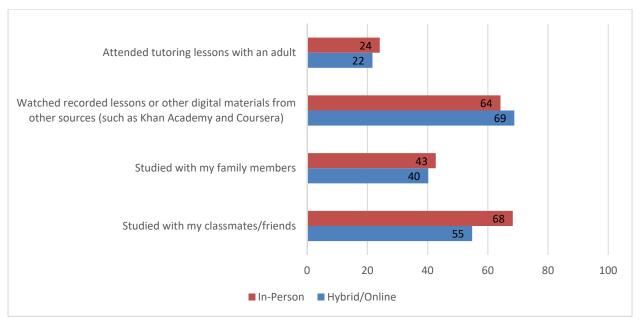
they studied with a family member or with classmates or friends either a few times in a typical week or every day/almost every day.

Hybrid/Online Students

Those attending online or in a hybrid model were less likely than in-person students to report participating in afterschool or weekend activities with others. Only about half of the hybrid/online students reported studying with classmates at least a few times per week, and fewer students reported doing so with family. In addition, only about one-quarter of these students reported working with a tutor provided by their school or receiving tutoring with another adult outside of school time.

Overall, the in-person students reported having more interaction with others while learning outside of class time, while the hybrid/online students reported studying more through digital materials.

Figure 5
Student Reports of Their Weekly Exposure to Afterschool or Weekend Activities



Academic Commitment

Because we hypothesized that there might be changes in student academic achievement during the pandemic, it was decided to keep the survey items concerning academic self-efficacy that were included on the pre-pandemic surveys administered during 2018 and 2019 (see Figure 6 and Figure 7).

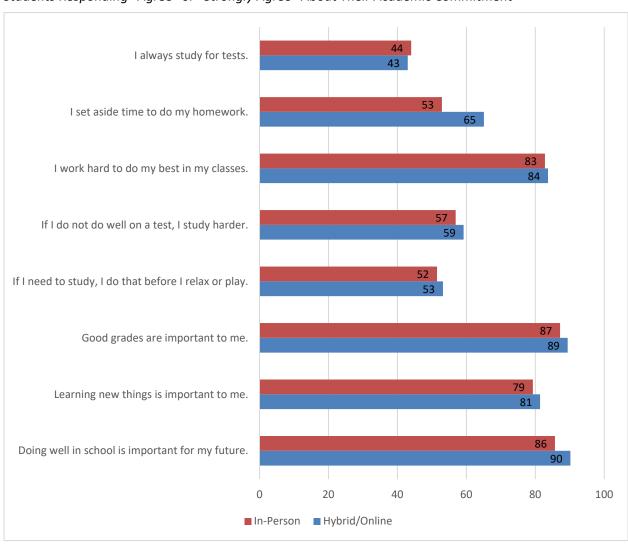
In-Person Students

Based on responses from our secondary students, in-person students tended to have positive academic self-efficacy and positive expectations for the future. For example, more than three-quarters

of the students reported that learning new things and getting good grades are important. They also tended to agree that doing well in school is important for their future.

When asked about their academic commitment during the 2020–2021 school year, in-person students reported varying levels of effort. Specifically, 83% of these students reported that they worked hard to do their best in their classes. In contrast, less than half reported that they always studied for tests, and only a little over half reported that they studied harder if they did not do well on a test. Likewise, only about half reported that they set aside time to do homework and/or study before they relax or play.

Figure 6
Students Responding "Agree" or "Strongly Agree" About Their Academic Commitment



Hybrid/Online Students

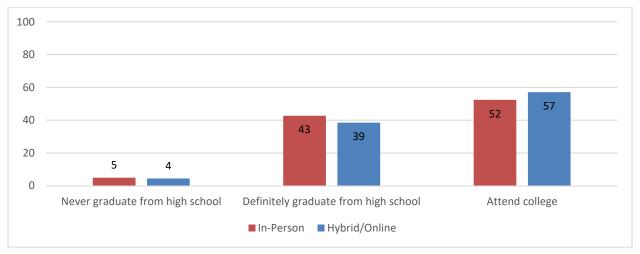
For the most part, the hybrid/online students' attitudes about their academic commitment were similar to those of the in-person students, with most reporting positive academic self-efficacy during the 2020–2021 school year. For example, most of the hybrid/online students reported that doing well in school is important for their future, and that good grades and learning new things are important. In addition, most of these students reported that they worked hard to do their best in their classes. However, nearly two thirds of the online/hybrid students reported that they set aside time to do their homework. In other words, 12% more of the hybrid/online students than in-person students reported having a dedicated time to do homework.

To conclude, both in-person and hybrid/online students reported high levels of positive academic self-efficacy, and positive expectations for the future. Both groups also reported that they work hard to do their best at school; however, a higher proportion of hybrid/online students reported having a dedicated time to do homework.

Academic Expectations

Ninety-five percent of the in-person students reported that they expect to graduate from high school or attend college in the future. Ninety-six percent of the hybrid/online students reported that they expect to graduate from high school or attend college.

Figure 7
Student Perceptions of Academic Expectations During the Pandemic



Barriers to Learning and Engagement

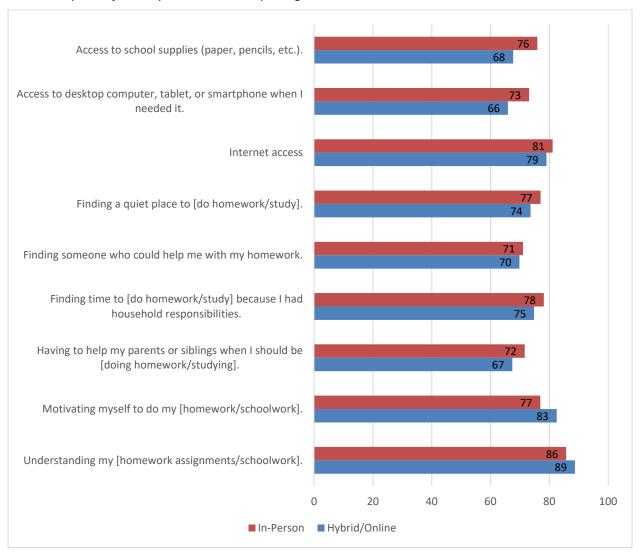
Given the variation in mode of learning offered by the schools, it seemed important to assess potential barriers beyond classroom activities that might detract from students' successful schooling (see Figure 8).

In-Person Students

According to the in-person students who responded to the survey, the majority experienced weekly barriers to learning during the 2020–2021 school year. For example, more than 70% of in-person students noted having some issues regarding school supplies such as paper or pencils at least a few times per week, with more than 40% noting that this was an everyday issue. In addition, despite earlier positive student reports about their access to technology, very large proportions of the in-person students noted that they had problems accessing a desktop computer, tablet, or smartphone and had issues with internet access a few times to every day during a typical week.

Large proportions of students who attended school in-person also reported experiencing a variety of barriers to completing homework a few times a week to every day/almost every day. For example, more than 70% of the students reported having some trouble finding a quiet place to do homework, with similar percentages reporting that general household responsibilities or helping their parents or siblings interfered with completing their homework. In addition, most in-person students reported having trouble getting help with their homework, an issue that was particularly salient given the high proportion of students who reported having at least some difficulty in understanding and/or motivating themselves to do homework.

Figure 8
Student Reports of Weekly Barriers to Completing Schoolwork or Homework



Hybrid/Online Students

While still an issue for a majority of the students, access to supplies was slightly less of a barrier for the hybrid/online students than for the in-person students. More specifically, 8% fewer hybrid/online students reported having trouble accessing school supplies and 7% fewer reported having issues accessing technology such as desktop computers or tablets during a typical week. Despite this, similar percentages of hybrid/online students reported having issues with internet access during a typical week, with half also reporting that this was a daily or almost daily occurrence.

Large proportions of hybrid/online students also reported experiencing weekly barriers to completing their homework. As with the in-person students, most hybrid/online students had trouble finding a quiet place to study, with a large proportion stating that this occurred every day or almost

every day. In addition, while more than two thirds of these students reported that household responsibilities and/or having to help family members during school time interfered with their studies, in most cases this was only an occasional issue. More than two thirds of the students also noted that they typically had trouble finding someone to help with their schoolwork, understanding their schoolwork, or getting motivated to do schoolwork on a weekly or greater basis. On this last point, 6% more hybrid/online students than in-person students noted having issues with motivation during a typical week.

To conclude, students in both learning models experienced significant and frequent barriers to learning during the 2020–2021 school year. Internet access was a significant barrier for both in-person and online/hybrid students; however, in-person students more frequently reported issues with school supplies. Motivation to engage in schoolwork was reported by a higher proportion of hybrid/online students.

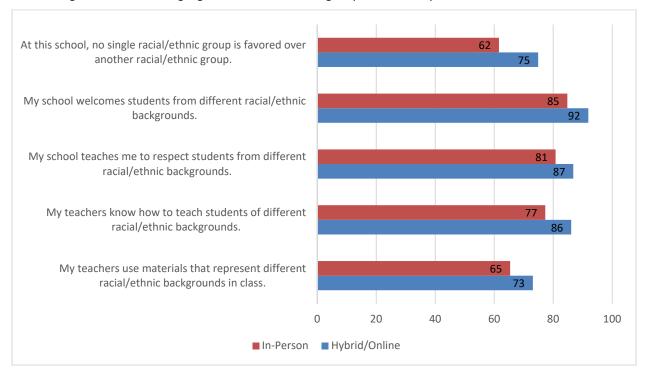
Intergroup Relationships

One goal of the Magnet School Assistance Program is to promote racial diversity and desegregation (see Figure 9 and Figure 10).

In-Person Students

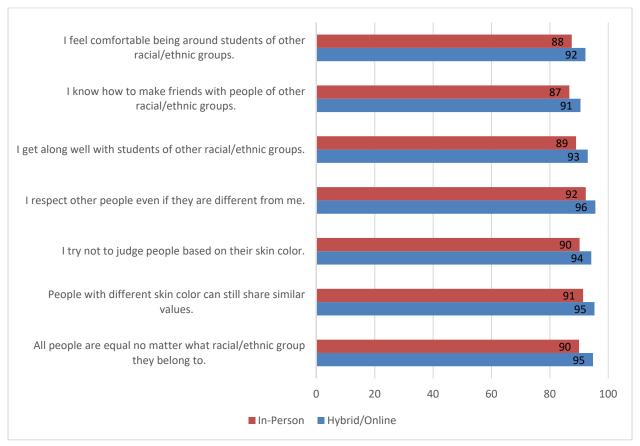
In general, students who attended school in-person had positive perceptions of how well their schools promoted intergroup relationships for students from different racial or ethnic backgrounds. More than three-quarters of the in-person students reported that their school is welcoming, that students are taught to be respectful, and/or that the faculty knew how to teach students of different racial/ethnic backgrounds. In addition, more than half of the students agreed that their teachers use materials that represent different racial/ethnic backgrounds and that no single racial/ethnic group is favored over another.

Figure 9
Student Agreement or Strong Agreement About Intergroup Relationships



In-person students were also asked to report on their own relationships with students of other racial or ethnic groups. In this case, the vast majority of the students agreed or strongly agreed that they respect others who are different, that they believe people with different skin colors can still share similar values, that they try not to judge people based on their skin color, and that all people are equal no matter what racial/ethnic group they belong to. Students also reported that they get along well with, feel comfortable being around, and know how to make friends with people of other racial/ethnic groups.

Figure 10
Student Agreement or Strong Agreement About Intergroup Relationships



Hybrid/Online Students

The hybrid/online students were even more positive in their opinions than the in-person students regarding whether their school promoted racial diversity and desegregation. In this case, almost all students reported that their school welcomes students from different racial/ethnic backgrounds. Most of the students also reported that their school taught them to respect students from different racial/ethnic backgrounds, and that their teachers knew how to teach these students. Finally, most students reported that no single racial/ethnic group was favored over others and that teachers used materials that represented different racial/ethnic backgrounds in class.

As with the in-person students, the vast majority of those who attended school in a hybrid/online mode had positive views about their relationships with their peers of other racial or ethnic groups. This included general opinions about the respect they hold for people who are different from them. Hybrid/online students also tended to agree with the items about skin color, indicating that they believe they can share similar values with people of different racial/ethnic identities and that they do not judge people based on their skin color. Likewise, more than 90% of the students agreed with the items about other racial/ethnic groups. That is, they believed that all people are equal no matter the racial/ethnic

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group to which they belong. These students also indicated that they get along with, feel comfortable with, and know how to make friends with students of other racial/ethnic groups.

Overall, students in both in-person and hybrid/online models reported positive beliefs about students from diverse racial and ethnic groups and their relationships with students that are different from them. Interestingly, hybrid/online students scored their schools more highly on racial/ethnic climate and equal treatment of all racial groups than in-person students.

Teacher Survey Descriptive Results

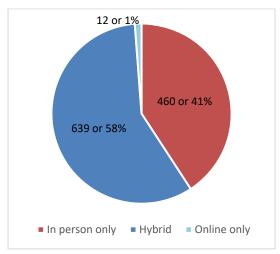
The following presents the descriptive findings for the 2021 teacher survey. This includes results for the teachers who completed the in-person version of the survey as well as those who completed the hybrid/online version. We begin by presenting results regarding school context and teacher practices including teaching activities and experiences. After this we present the results regarding social-emotional learning including student support and student integration and support. Finally, we present results regarding teacher supports including teacher professional development and teacher collaboration.

Learning Location

According to the teachers, the mode of teaching and learning varied across schools and within the individual schools that participated in the study (see Figure 11). While less than half of the teachers reported that they taught solely in person from their school campus, all but one of these teachers indicated that they simultaneously taught students at school and other students online. Furthermore, only 3% (n = 15) of in-person teachers reported that all of their students attended their class(es) inperson at campus. Similar findings were found for the teachers who responded to the hybrid/online survey. In this case, most of the teachers also reported that they at least sometimes taught students simultaneously in person at school and online (496 or 76% of hybrid/online teachers), with only 1% (n = 12) reporting that they taught solely online from home during the 2020–2021 school year.

Overall, despite identifying a primary model of teaching (i.e., in-person or online/hybrid), the vast majority of teachers reported that they simultaneously taught students in-person and online. That is, whether teachers taught from home or from their school site, they rarely taught classes with all students attending in the same format.

Figure 11
Teacher-Reported Mode of Teaching



Class-Time Activities

In-Person Teachers

Teacher reports about school-time activities tended to correspond with those of the students, with moderate to large percentages of the in-person teachers reporting that they used the different techniques on the survey at least a few times to every day during a typical week (see Figure 12). More specifically, more than 70% of respondents reported that they made short videos for their students to watch and that they created prerecorded lessons or other digital materials for students. About 60% of the in-person teachers also reported having their students watch or listen to educational television or radio programs during class or use paper-based textbooks, workbooks, or worksheets at least a few times during a typical week. Even more teachers reported having their students use digital textbooks, workbooks, or worksheets, with most doing so on an everyday or almost everyday basis.

In-person teachers were also asked to report on how they structured class time. During the 2020–2021 school year, the vast majority made use of traditional structures on a weekly or more frequent basis, including the use of teacher-led lectures or discussions or small groups and pair work. Most to all of the teachers also reported that they participated in student discussions, responded to student questions, or gave personalized feedback on assignments or projects during a typical week. Moderately fewer of these teachers also had students provide peer feedback on projects and/or homework assignments each week.

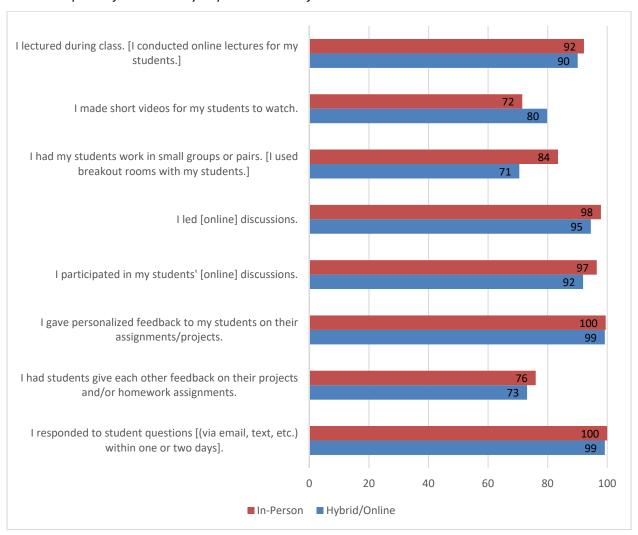
Hybrid/Online Teachers

Somewhat larger proportions of the hybrid/online teachers also reported using the different activities listed on the teacher survey. The most common activity involved having students use digital textbooks, workbooks, or worksheets with almost all using them on a weekly basis, and most using them

every day or almost every day. Large proportions also reported that during a typical week they made digital materials such as short videos or prerecorded lessons or other materials. Likewise, many of the hybrid/online teachers had students watch or listen to educational television or radio during class time or use paper-based textbooks, workbooks, or worksheets.

Figure 12

Teacher Reports of Their Weekly Implementation of School-Time Activities



When looking at how the hybrid/online teachers structured their class time, they tended to report similar overall, albeit more frequent, uses of each structure. For example, almost all of these teachers reported that they lectured during class or led discussions, with the majority doing so on an everyday or almost everyday basis. Almost all of the hybrid/online teachers also reported that they participated in students' online discussions, responded to student questions within a day or two, or gave personalized feedback on student assignments or projects on a weekly or greater basis. Finally, about 70% of the

teachers reported that they at least sometimes had students work in small groups or pairs and/or give peer feedback on their projects or homework assignments.

Overall, teachers in both learning models reported utilizing a variety of instructional practices during class time. A majority (over 70%) of all teachers reported that they made short videos for their students to watch, and that they created prerecorded lessons or other digital materials for students. Hybrid/online teachers and in-person teachers reported engaging students in similar activities; however, hybrid/online teachers reported more frequent use of each activity.

Professional Development Types and Activities

Teachers were asked to report on the number of hours they spent on different types of professional development (PD) that they received during the 2020–2021 school year. Options listed included 0 hours, 1–4 hours, 5–9 hours, 10–14 hours, and 15+ hours. When examining the results for the top two categories it became clear that certain types of PD were emphasized more than others.

In-person Teachers

More specifically, more than half of the in-person teachers reported meeting with other teachers for 10+ hours to develop materials or activities or to work on instructional strategies. Nearly half also reported that they participated in formal PD sessions taught by a teacher, coach, or administrator from their school or reviewed student assessment data with individuals from one of these groups to make instructional decisions. Finally, more than one-quarter of the teachers reported spending 10+ hours attending formal PD sessions taught by an outside vendor or meeting with a coach to work on instructional strategies (see Figure 13 and Figure 14).

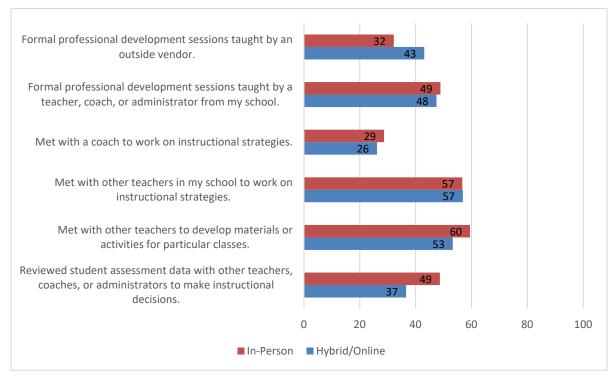
Similarly, in-person teachers were asked to report the type of professional development they participated in during the 2020–2021 school year (see Figure 13). In this case, more than half of teachers reported spending 10+ hours attending PD on using technology for teaching purposes or content area teaching. Less than half of these teachers also reported spending 10+ hours in PD learning about how to align curriculum content, assessment, and evaluation with state standards, making data-based decision making, differentiating instruction, or building social-emotional competencies into instruction. The PD activities in which in-person teachers were least likely to report spending 10+ hours included teaching special student populations and Response to Intervention (RTI).

Hybrid/Online Teachers

Teachers who taught hybrid/online during the 2020–2021 school year were varied in their reports of which types of PD received more emphasis in terms of hours (see Figure 14). Among these teachers, the types that most commonly received 10+ hours of time included meeting with other teachers to work on instructional strategies or to develop materials or activities for particular classes. More than 40% of these teachers also reported spending 10+ hours in formal PD sessions either taught by a teacher, coach, or administrator in their school or from an outside vendor. The least popular types of PD in which hybrid/online teachers spent 10+ hours included reviewing student assessment data with other

teachers, coaches, or administrators to make instructional decisions and meeting with a coach to work on instructional strategies.

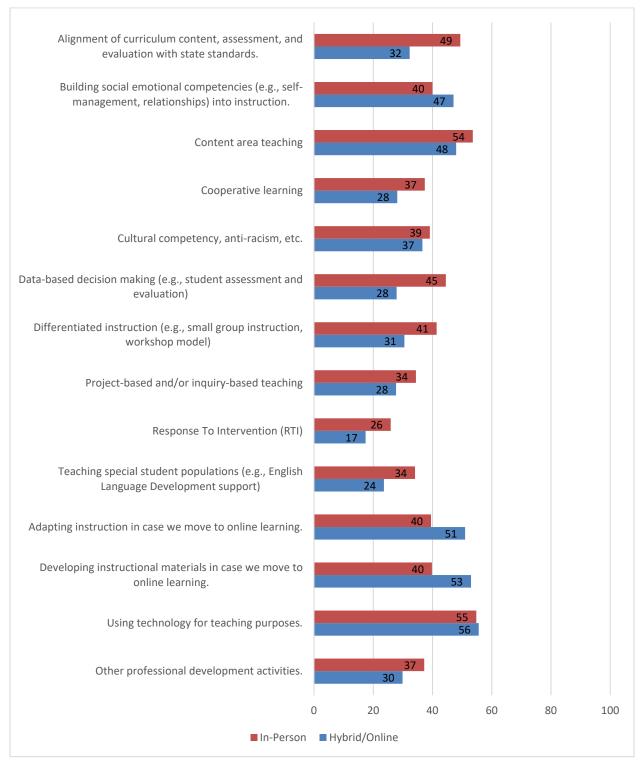




Hybrid/online teachers were also asked to report on the number of hours they spent on different PD activities (see Figure 14). In this case, at least half of the teachers reported receiving 10+ hours on three of the activities that were each geared towards online teaching. These include using technology for teaching purposes, proactively developing instructional materials, and adapting instruction in case they moved to online learning. Content area teaching and building social-emotional competencies into instruction also received stronger emphasis. Finally, the two activities in which hybrid/online teachers were least likely to report spending 10+ hours matched those for the in-person teachers: teaching special student populations and Response to Intervention (RTI).

To conclude, over half of both in-person and hybrid teachers reported spending 10+ hours collaborating with other teachers and participating in PD about integrating technology for learning. Both in-person and online/hybrid teachers were least likely to spend 10+ hours in PD about teaching special student populations and Response to Intervention (RTI).

Figure 14
Teacher Reports of Spending 10+ Hours on Professional Development Activities

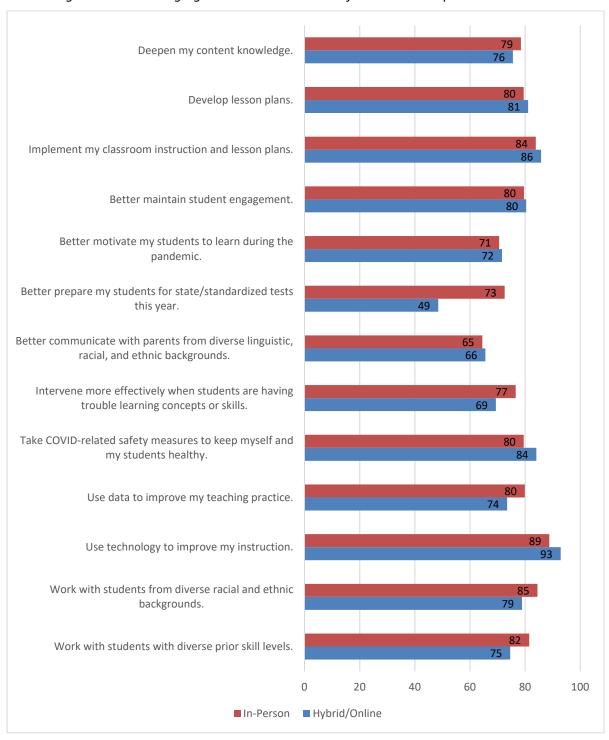


Perceived Professional Development Outcomes

In-Person Teachers

When rating professional development outcomes, in-person teachers tended to have positive perceptions about the competencies developed during trainings (see Figure 15). Among the highest rated outcomes were learning how to use technology to improve instruction, working with students from diverse racial and ethnic backgrounds, implementing classroom instruction and lesson plans, and working with students with diverse prior skills levels. In addition, the only outcome in which less than 70% of in-person teachers agreed or strongly agreed involved developing better communication with parents from diverse linguistic, racial, and ethnic backgrounds.

Figure 15
Teacher Agreement or Strong Agreement About Their Professional Development Outcomes



Hybrid/Online Teachers

In contrast to the in-person teachers, hybrid/online teachers were varied in their ratings of PD outcomes (see Figure 14). More specifically, almost all hybrid/online teachers reported that they learned how to use technology to improve their instruction. In addition, more than 80% reported that the PD helped them implement classroom instruction and lesson plans, take COVID-related safety measures, develop lesson plans, and maintain better student engagement. In contrast, less than 70% of the teachers felt that the PD helped them intervene more effectively when students were having trouble learning concepts or skills or better communicate with parents from diverse backgrounds. Finally, less than half of the hybrid/online teachers believed that they learned how to better prepare students for state/standardized tests.

Overall, in-person teachers had positive perceptions of PD outcomes while online/hybrid teachers were varied in their perceptions. High proportions of teachers in both models believed they learned to integrate technology to improve instruction.

Teacher Collaboration Activities

In-Person Teachers

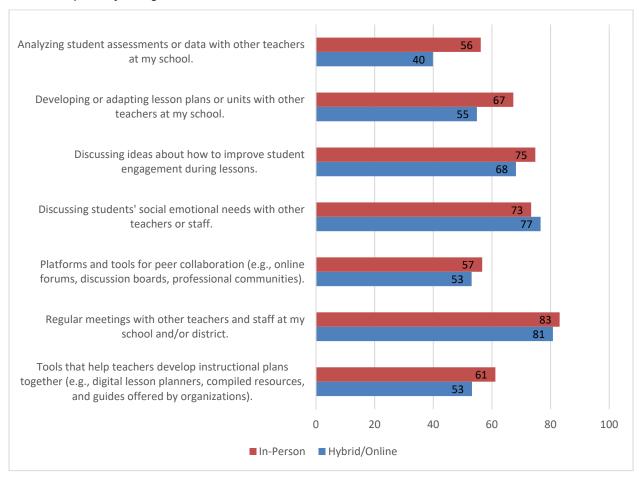
Teachers were asked to report on how frequently they participated in different collaboration activities with other teachers (see Figure 16). Among the in-person teachers, more than two thirds reported that they had regular meetings with other teachers at their school or district, discussed ideas about how to improve student engagement during lessons or students' social-emotional needs, or developed or adapted lesson plans or units with other teachers a few times per month to weekly. More than half of the in-person teachers also reported using tools that help teachers develop instructional plans together, using platforms and tools for peer collaboration, or analyzing student assessments or data with other teachers at their school.

Hybrid/Online Teachers

Those who were teaching hybrid or online were only somewhat less likely to report collaborating with other teachers a few times per month to weekly. In this case, the most common activities included regular meetings with other teachers or staff at their school or district, discussing students' social-emotional needs, or discussing ideas about how to improve student engagement during lessons. About half of the hybrid/online teachers also reported that they developed or adapted lesson plans or units with other teachers, used tools that help teachers develop instructional plans together, or utilized platforms and tools for peer collaboration a few times per month or more. Finally, only 39.9% of hybrid/online teachers reported that they collaborated with other teachers to analyze student assessments or data.

To conclude, both in-person and hybrid/online teachers reported consistent collaboration with teachers from their school or district. Hybrid/online teachers reported less but similar types of collaboration as in-person teachers.

Figure 16
Teacher Reports of Doing Collaborative Activities a Few Times Per Month or More



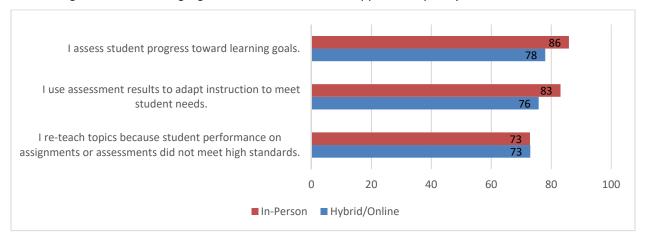
Student Support

In-Person Teachers

Teachers were asked to report on how frequently they focused on standards-based instruction as a way to support their students (see Figure 17). Among the in-person teachers, this seemed to be a regular practice with more than 80% reporting working weekly to daily on assessing student progress toward learning goals or using assessment results to adapt instruction to meet student needs, and more than 70% reporting that they reteach topics when student performance on assignments or assessments did not meet high standards.

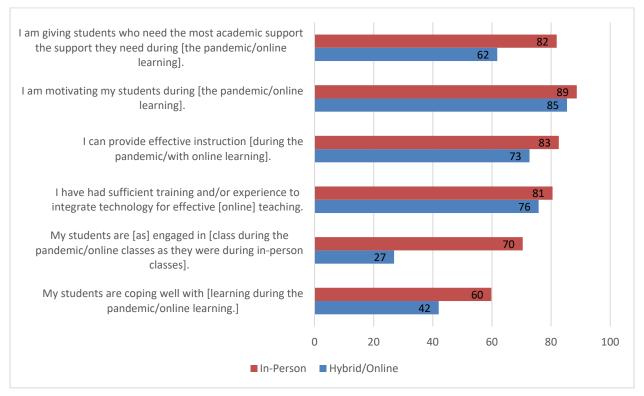
Figure 17

Teacher Agreement or Strong Agreement About Student Support: Frequency



Respondents were also asked to report on their effectiveness using a 4-point agreement scale; they were asked how effective they were at teaching academic content and at supporting students during the pandemic. Those who taught solely in person tended to agree about how well they performed, with more than 80% agreeing or strongly agreeing that they motivated their students, provided effective instruction, supported the students who needed the most academic support, and had sufficient training and/or experience to integrate technology for effective teaching. A majority, albeit lower proportion of in-person teachers also reported that their students were engaged during class and/or coped well with learning during the pandemic.

Figure 18
Teacher Agreement or Strong Agreement About Student Support: Agreement Scale



Hybrid/Online Teachers

The majority of the hybrid/online teachers tended to spend large amounts of time focused on supporting students through standards-based instruction. More specifically, about three quarters of the hybrid/online teachers reported that they assessed student progress towards learning goals on a weekly or daily basis. Similar percentages of teachers also reported that on a weekly or daily basis they used assessment results to adapt instruction to meet student needs or retaught topics because student performance on assignments or assessments did not meet high standards.

When asked to report whether they were effective teachers and supported their students during the pandemic, hybrid/online teachers were varied in their ratings. More specifically, while more than 80% reported that they could motivate their students during online learning, 76% felt that they had sufficient training and/or experience using technology to deliver effective online teaching, 73% felt that they provided effective online instruction, and less than two thirds felt that they supported the students who needed the most academic support during online learning. Finally, less than half of the hybrid/online teachers felt that their students were coping well with online learning, and even fewer believed that their students were as engaged in online classes as they were during in-person classes before the pandemic.

Overall, both in-person and hybrid/online teachers (more than 80% and about 75% respectively) reported weekly to daily focus on student progress toward learning goals. In-person teachers reported more positive perceptions of their effectiveness than hybrid/online teachers. Similarly, a majority of inperson teachers believed their students were engaged during class and coped well with learning during the pandemic while less than half of hybrid/online teachers believed the same about their students.

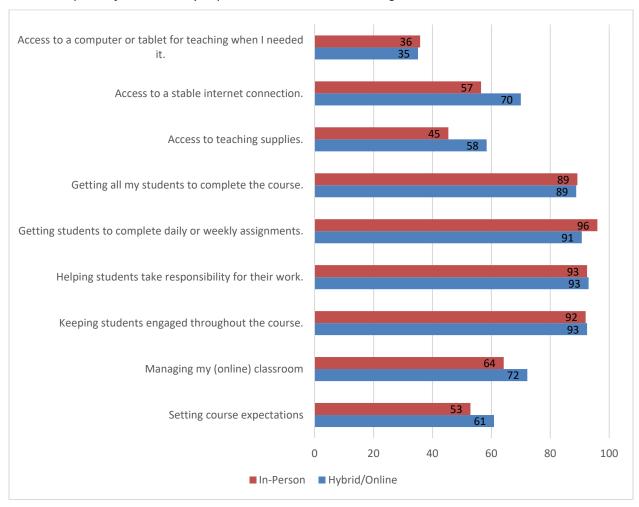
Barriers to Teaching and Learning

In-Person Teachers

Teachers were also asked to report on potential barriers that could impact their teaching as well as their students' successful learning (see Figure 19). In contrast to the students, only moderate proportions of the in-person teachers reported having issues with school or technological supplies sometimes or every day/almost every day. For example, only about half of the teachers reported issues with having a stable internet connection or with accessing teaching supplies, and only about one third had any trouble accessing a computer or tablet for teaching.

Based on their responses, almost all in-person teachers experienced barriers involving their students, with many doing so on a daily or almost daily basis. Moderate proportions of the in-person teachers reported that they experienced pandemic-related trouble managing their classrooms or setting course expectations at least sometimes. Also, almost all teachers felt that it was hard to keep their students engaged throughout the course, including getting their students to complete daily or weekly assignments or even complete the course. Finally, more than 90% of the teachers found it difficult to help students take responsibility for their own work, with most feeling this way on a daily or almost daily basis.

Figure 19
Teacher Reports of Their Weekly Exposure to Barriers to Teaching



Hybrid/Online Teachers

Teachers who taught in a hybrid or online only mode during the 2020–2021 school year were somewhat more likely than those who taught solely in-person to report experiencing some of the barriers listed on the survey. For example, more hybrid/online teachers reported having issues at least a few times per week involving access to teaching supplies or a stable internet connection. In addition, hybrid/online teachers were more likely than were in-person teachers to report that they had some issues with managing their classroom or setting course expectations. In contrast, only one third of hybrid/online teachers reported having issues accessing a computer or tablet for teaching on a weekly to daily basis, which was similar to those who taught in person.

As with the in-person teachers, almost all of the hybrid/online teachers reported experiencing barriers involving their students, with the majority reporting issues on a daily or almost daily basis. More specifically, more than 90% of these teachers reported having trouble helping students take

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responsibility for their work, keeping students engaged throughout the course, and getting them to complete daily or weekly assignments. In addition, nearly 90% of the teachers noted that they struggled to get all of their students to complete the course.

To conclude, student-related barriers exceeded technology-related barriers for in-person teachers. In contrast, hybrid/online teachers reported more frequent technology-related issues. Both in-person and hybrid teachers reported pandemic-related barriers to student engagement with more than 90% of both groups reporting that it was frequently difficult to motivate students to take responsibility for their work.

Parent Involvement

In-Person Teachers

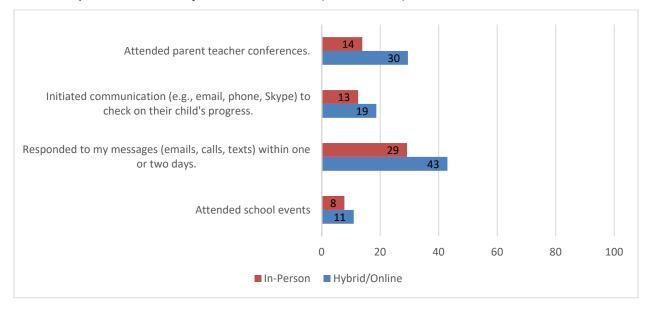
Research shows that level of parent involvement can impact student achievement and adjustment in school (Desforges & Abouchaar, 2003). Teacher reports of parent involvement during the pandemic indicated low levels of parent involvement in classes taught by the in-person teachers. More specifically, less than one fifth of in-person teachers reported that most or nearly all of their parents attended parent teacher conferences, with about half reporting that few to none attended during the 2020–2021 school year. Results were similar regarding parent-initiated communication and school events attendance with very small percentages participating and about half or more reporting that few to no parents participated (47% and 64%, respectively). While reports of participation were still low, about one-quarter of the in-person teachers reported that most or nearly all of the parents respond to their communication within one or two days, and only about one-quarter reported that few to none of their parents responded (see Figure 20).

Hybrid/Online Teachers

While level of parent participation reported by hybrid/online teachers during the 2020–2021 school year was still low, results were often more positive than with the in-person teachers. For example, over 40% of hybrid/online teachers reported that most or nearly all parents responded to messages within one or two days, 30% reported that parents attended conferences, and nearly one fifth reported having parent-initiated communication. Despite this, only 11% of teachers reported that most or nearly all of the parents attended online school events. Finally, the percentages of hybrid/online teachers who reported that few of the parents participated in the different activities were 13% to 21% lower than the reports of the in-person teachers.

Overall, hybrid/online teachers reported higher levels of parent involvement; however, both groups' reports indicate that parental involvement was low for both groups.

Figure 20
Teacher Reports About Level of Parent Involvement (61% to 100%)

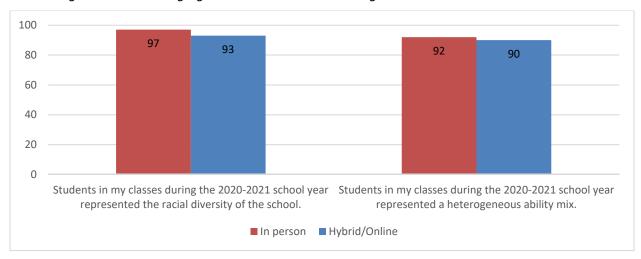


Student Integration

The vast majority of the teachers reported on the diversity of the students in their classes during the 2020–2021 school year. More specifically, more than 90% of the in-person teachers reported that their students represented a heterogenous ability mix and that their students represented the racial diversity of their school. Results were very similar for the hybrid/online teachers with approximately 90% agreeing or strongly agreeing with both statements (see Figure 21).

Figure 21

Teacher Agreement or Strong Agreement About Student Integration



Student Outcome Results: Student Perspectives

As previously noted, when examining overall results for the 2020–2021 survey we found that the majority of in-person and hybrid/online students had positive perceptions about their learning, reporting that they either learned about as much (38.2% and 37.8%) or more than before the pandemic (24.6% and 22.0%). To gain additional insight into the students who had these positive perceptions, we used crosstabs to examine the relationship between this perceived outcome and the other survey items completed by both groups of students. The following provides details of the items where we found more pronounced relationships.

Technology

We began by examining the relationship between student learning, mode of learning, and students' access to technology. When focusing solely on the students who reported having access to a laptop, desktop computer, or tablet, we found a clear positive relationship for both groups of students. More specifically, more than 60% of the in-person students who reported having their own device (64.8%) or a device from school (61.6%) also felt that they learned as much or more than before the pandemic. A majority of the hybrid/online students showed the same relationship, although in this case results were most similar for those who had a device from school (60.5%) and slightly less similar for those who reported having their own device (56.8%).

Class-Time Activities

In-Person Students

When examining student activities, we also found a stronger relationship for certain class-time activities. Most pronounced of these involved students who reported that they used digital materials once a week or more frequently. More specifically, 58.2% of the in-person students had positive learning perceptions and also frequently worked on digital textbooks, workbooks, or worksheets while a similar percentage (56.1%) reported working on paper textbooks, workbooks, or worksheets. Additionally, 53.9% of in-person students had positive perceptions of their learning and worked in small groups or pairs.

Hybrid/Online Students

Of the hybrid/online students, 51.0% had positive perceptions of their learning and watched or listened to prerecorded lessons or other teacher-made digital materials. Also, we found that at least half of the hybrid/online students had positive learning perceptions and watched short videos made by their teachers (50.3%) on a weekly or greater basis.

Overall, just over half of in-person students who had positive learning perceptions reported using digital or paper learning materials and working in small groups or pairs. About half of hybrid/online students with positive learning perceptions reported frequently engaging with prerecorded lessons or teacher-made digital materials (e.g., short videos).

Afterschool or Weekend Activities

When examining perceptions of learning and afterschool or weekend activities the most pronounced relationship found involved student participation in tutoring lessons with an adult. More specifically, 47.1% of in-person students and 45.5% of hybrid/online students surveyed reported that they did not participate in tutoring but still had positive learning perceptions. In contrast, only 28.8% of in-person students and 32.8% of hybrid/online students reported that they did not participate in tutoring and had negative learning perceptions during the pandemic.

Barriers to Learning and Engagement

When examining student perceptions of their learning we found that some barriers showed a stronger negative relationship to student perceptions of learning during the pandemic. More than half of the students reported that they experienced an individual barrier to their learning but still perceived that they learned as much or more than before the pandemic. More specifically, 54.4% of the in-person students who reported frequently having trouble understanding their homework assignments still reported learning about the same or more than before the pandemic. Similarly, 52.7% of the hybrid/online students who frequently reported having trouble understanding their schoolwork still reported learning about the same or more than before the pandemic. Likewise, more than half of the inperson students and slightly less than half of the hybrid/online students who had positive perceptions of their learning reported at least sometimes having issues with internet access (51.8% and 47.3%), motivation to do work (50.4% and 49.6%), or with finding time to do homework because of household responsibilities (50.1% and 45.3%).

Intergroup Relationships

relationships with both in-person and hybrid/online students' perceptions of learning. For example, more than half of the students who reported learning the same or more than before the pandemic also agreed or strongly agreed that they respect people who are different from them (59.4% and 6.9%), believe that people with different skin colors can share similar values (58.6% and 57.0%), and believe that all people are equal no matter what racial/ethnic group they belong to (57.6% and 56.4%). More than half of students also showed positive relationships regarding learning and various items about getting along with, feeling comfortable with, and making friends with individuals from other racial/ethnic groups. Finally, the majority of in-person and hybrid/online students had positive perceptions of learning and agreed that their school is welcoming to and teaches respect for students of different racial/ethnic groups, and that their teachers know how to teach these students. The only two intergroup items where less than half of in-person and hybrid/online students reported positive perceptions of learning focused on teachers' use of materials that represent different racial/ethnic backgrounds in class (43.6% and 45.8%) and no single racial/ethnic group being favored over another at their school (41.2% and 45.8%).

Student Outcome Results: Teacher Perspectives

In contrast to the students, teachers were generally less optimistic about student learning during the 2020–2021 school year. As noted earlier, more than half of the in-person teachers (56.6%) and more than three quarters of the hybrid/online teachers (75.2%) reported that their students learned less than they did prior to the pandemic. It should be kept in mind, though, that these and the following results reflect both elementary and secondary school teachers' opinions whereas the previous results only reflected those of the secondary students. Thus, comparisons between the two results should be made with caution.

Learning Locations

We begin by examining the relationship between teachers' perceptions of student learning and their reports about simultaneous teaching where some of their students are in person at the same time that others are online. In this case, more than half of the teachers who completed the in-person survey showed a negative relationship wherein they believed that their students learned less than they did before the pandemic, but also reported that they did simultaneous teaching (58.3%) and had at least some of their students attend in person while others attended online (59.1%). This relationship was much more pronounced for the hybrid/online teachers with more than three-quarters having negative perceptions of their students' learning and indicating that they taught in a simultaneous format and/or had students attend in person while others attended online (76.6% and 79.3%).

Class-Time Activities

In-person Teachers

When examining teachers' reports of certain school activities (12 activities) that they implemented, we once again found negative relationships with teachers' perceptions of student learning. In this case, more than half of the in-person teachers reported negative perceptions of student learning but also reported implementing the following activities a few times to almost every day: responding to student questions (58.4%), giving personalized feedback on assignments/projects (58.1%), leading discussions (56.2%), participating in students' discussions (55.5%), lecturing in class (52.2%), and having students use digital textbooks, workbooks, or worksheets (54.6%). For each of these remaining six activities, the percentage of in-person teachers who reported implementing them at least a few times per week and who had negative perceptions of learning ranged from only 30.6% to 47.8%, which is much lower than for those who taught hybrid/online.

Hybrid/Online Teachers

The relationships found for the first six activities (i.e., responding to student questions, giving personalized feedback, leading discussions, participating in students' discussions, lecturing in classes, and having students use digital textbooks, workbooks, or worksheets) was stronger for the hybrid/online teachers with between 69.9% and 76.8% reporting implementing the activities at least a few times a

week and having negative perceptions about their students' learning. A majority of the hybrid/online teachers also reported having negative perceptions of student learning but did report implementing the remaining six other school activities listed on the surveys a few times or more during a typical week. More specifically, more than half of the teachers felt that their students learned less than before the pandemic but also reported creating prerecorded lessons or other digital materials (63.0%), making short videos for students to watch (61.2%), and having students watch or listen to educational television or radio programs during class time at least a few times per week (54.7%). Hybrid/online teachers who had negative perceptions of learning also tended to report having students provide peer feedback on projects and/or homework assignments (54.7%), work in small groups or pairs (54.0%), and/or watch or listen to educational television or radio programs during class time (54.7%).

Overall, both in-person and hybrid/online teachers had negative perceptions of student learning despite frequent use of all 12 class activities listed on the survey. Overall, hybrid/online teachers who had negative perceptions of student learning reported higher levels of engagement in these activities than their in-person counterparts.

Professional Development

In-Person Teachers

When looking at in-person teachers' perceived PD outcomes, only one item stood out. Of inperson teachers, 49.6% had negative perceptions of student learning but agreed or strongly agreed that PD helped them use technology to improve their instruction.

Hybrid/Online Teachers

Hybrid/online teachers tended to show a pronounced relationship between their negative perceptions of student learning and their reporting of receiving less than 10 hours of the different PD options listed on the survey. This was true for 11 of the PD options listed, with the largest percentages found for Response to Intervention (66.8%), teaching special student populations (62.4%), cooperative learning (59.7%), and project-based and/or inquiry-based teaching (59.3%). Other options where more than half of the hybrid/online teachers had negative perceptions of learning and reported less than 10 hours of PD focused on data-based driven decision making, meeting with a coach to work on instructional strategies, differentiated instruction, standards alignment, cultural competency, reviewing student assessment data with others to make instructional decisions, and other PD activities (51.9% to 59.1%).

Similar results were found for the hybrid/online teachers in regard to their perceived PD outcomes. More specifically, more than half of the hybrid/online teachers tended to report that students learned less than before the pandemic but also felt that they experienced most of the positive outcomes listed on the survey. The largest percentages for these outcomes involved the use of technology to improve instruction (72.6%), their ability to implement classroom instruction and lesson plans (64.3%), and their ability to take COVID-related safety measures (64.3%), as well as their ability to develop lesson plans (60.3%) and better maintain student engagement (59.7%). Other items where

more than half of the teachers showed a negative relationship between their own outcomes and student learning focus on working with students from diverse racial/ethnic backgrounds or diverse prior skills, deepening their content knowledge, using data to improve their teaching practice, better motivating students to learn during the pandemic, and intervening more effectively when students have trouble learning concepts or skills.

Finally, when looking at in-person teachers' perceived PD outcomes, only one item stood out. Approximately half of in-person teachers had negative perceptions of student learning but agreed or strongly agreed that PD helped them use technology to improve their instruction. In contrast, hybrid/online teachers' PD experiences and perceptions of PD outcomes showed significant relationships with their perceptions of student learning. Specifically, a pronounced relationship appeared between negative perceptions of student learning and receiving less than 10 hours of different PD for 11 of the options on the survey. Additionally, more than half of the hybrid/online teachers tended to report that students learned less than before the pandemic but also felt that they experienced positive outcomes from the PD they participated in.

Teacher Collaboration

We found a relationship between hybrid/online teachers' perceptions of student learning and three of the items regarding teacher collaboration. In this case, the teachers who had negative perceptions of student learning tended to report discussing ideas about how to improve student engagement during lessons a few times per month to weekly with their colleagues (51.8%). Even more pronounced were hybrid/online teacher reports of the time they spent discussing students' social-emotional needs with other teachers/staff or having regular meetings with other teachers or staff at their school or district. In each case, teachers who had negative perceptions were more likely to report doing these activities a few times per month to weekly (58.2% and 61.7%, respectively).

Student Support

Both hybrid/online and in-person teachers tended to report negative perceptions of student learning but positive perceptions about their classes representing a heterogenous ability mix (69.5% and 52.5%, respectively) and the students in their classes representing the racial diversity of their school (71.0% and 56.2%). More specifically, more than half of the hybrid/online teachers reported that they thought their students learned less than before the pandemic but that they could engage (67.7%) and motivate their students (63.5%), assess student progress towards learning goals (58.7%), and have sufficient training or experience to integrate technology for effective teaching (54.7%). The same negative relationship was also found among hybrid/online teachers regarding whether they reteach topics when student performance does not meet high standards (55.3%), their ability to provide effective instruction (51.1%), and about the coping abilities of their students to learn during the pandemic (54.6%).

Barriers to Teaching and Learning

In-Person Teachers

Teachers who reported experiencing some of the barriers on a weekly or greater basis also tended to have negative perceptions of their students' learning during the 2020–2021 school year. The most pronounced of these relationships were found for the items that focused more directly on issues of student participation. For example, more than half of the in-person teachers who felt that their students learned less than normal reported having at least some trouble each week keeping students engaged throughout the course (56.7%), helping students to take responsibility for their work (55.3%), getting students to complete daily or weekly assignments (57.9%), and getting all of their students to complete the course (54.4%).

Hybrid/Online Teachers

The relationship between teachers' negative perceptions of student learning and these four barriers (i.e., having at least some trouble each week keeping students engaged throughout the course, helping students to take responsibility for their work, getting students to complete daily or weekly assignments, and getting all of their students to complete the course) was even stronger for the hybrid/online teachers, ranging from 68.6% to 72.6% of those who took this version of the surveys. Finally, more than half of the hybrid/online teachers had negative perceptions of student learning and reported at least some issues in managing their online classroom (57.6%) and in having a stable internet connection (53.7%).

To conclude, barriers to teaching and learning were related to negative perceptions of student learning for both in-person and online/hybrid teachers. Student participation was reported as the biggest barrier for both groups, but the relationship was more pronounced for hybrid/online teachers than in-person teachers.

Parent Involvement

A direct relationship also seems to be present regarding level of parent involvement and teacher perceptions of student learning. More specifically, those in-person teachers who perceived that their students learned less during the 2020–2021 school year also tended to report that none to half of the parents attended conferences (51.5%), school events (55.1%), or initiated communication to check on their child's progress (54.8%). Similar, albeit more pronounced, findings were found for the hybrid/online teachers with percentages for each of these items ranging from 57.0% to 71.4%, with the biggest difference between groups of teachers found for attending school events (16.3%).

Summary and Discussion

This study provides early evidence for what it was like teaching and learning during the COVID-19 pandemic. Even though we were not able to randomly assign students and teachers to different modes of learning, because of variations in how the six districts and 31 participating schools in the survey

carried out teaching and learning during the 2020–2021 school year, we were able to examine differences at a descriptive level for those who had an in-person versus a hybrid or online only experience. In addition, we were able to examine whether there was any relationship between perceptions of student learning during the pandemic and the self-reported experiences of the teachers and students.

Descriptive Survey Results

The surveys of K–12 teachers reaffirmed the information that AES and the research team received from the grantees concerning variations in mode of teaching and learning in the 31 schools. More specifically, teachers were most likely to work in a hybrid mode where they spent part of the week online and part of the week in person with students, with 41% reporting that they taught in person and only 1% reporting that they taught online only. In addition, the surveys revealed that most teachers, whether they taught in a hybrid mode or in-person were asked to teach students simultaneously in person and online, a practice that received some early criticism in the press as challenging to carry out (see Lieberman, 2020; Natanson et al., 2021).

When examining school context further we found some commonalities among the teacher reports. For example, whether teachers taught in person or in some form of hybrid/online mode, they tended to carry out many of the teaching strategies that were used prior to the pandemic. This included responding to student questions and providing feedback on student assignments. We also found that high proportions of those who taught in both modes adopted new practices such as making short videos for students to watch and/or started having students use digital textbooks, workbooks, or worksheets on a weekly if not everyday basis.

Teacher surveys also revealed some interesting results concerning the supports that the teachers received during the pandemic. More than half of the in-person and hybrid/online teachers reported receiving at least 10 hours of PD during the 2020–2021 school year wherein they were able to work on instructional strategies and/or develop materials or activities with other teachers. Considering the demands on teachers to either teach solely online or simultaneously online and in person, it was not surprising that one of the other areas where at least half of the teachers received 10 or more hours of PD involved using technology for teaching purposes. Finally, while very large proportions of teachers tended to report positive outcomes of their PD experiences, the ones that stood out the most included feeling efficacious about their ability to use technology to improve their instruction, implement their classroom instruction, and take COVID-related safety measures to keep themselves and their students healthy.

When turning towards teachers' perceptions of social-emotional learning during the pandemic, we also found some interesting results concerning both the students and the parents of their students. More specifically, almost all of the in-person and hybrid/online teachers found it challenging to get their students to complete their assignments, to help their students take responsibility for their work, and to keep their students engaged throughout the course. Teachers also tended to report very low levels of parent involvement and communication. Among the most concerning of these examples is that only

29% of in-person teachers and 43% of hybrid/online teachers reported that parents responded to their calls, emails, and/or texts within one or two days.

Student surveys confirmed some of the results for teachers concerning social context and teaching practices. More specifically, the Grade 8 and Grade 10 students who were surveyed at the secondary schools varied in the mode of learning in which they participated. In this case, though, we found that while equal proportions of students attended school in person only or through a hybrid mode, 24% reported attending school online only and 2% simply reported attending hybrid/online without clarifying on their mode of learning.

When looking further at social context and teaching practices, we found some similarities among the in-person and hybrid/online students. For example, student reports were very similar regarding their access to technology with almost all reporting that they had access to a laptop, desktop computer, or tablet. It is interesting to note, though, that students in both groups were more than twice as likely to report using a device from school than they were about using a device that they already owned. In addition, both groups of students tended to agree with the teachers, reporting that their teacher(s) frequently made short videos for them to watch and had them use digital textbooks, workbooks, or worksheets each week.

When examining afterschool educational activities, we did find descriptive differences for the students who attended school in person versus hybrid/online. For example, in-person students were the most likely to report having interactions with others such as studying with classmates, friends, or other family members. In contrast, hybrid/online students were more likely to report using digital materials or online lessons from outside educational sources.

Interestingly, both in-person students and those who attended school in a hybrid or online mode had a number of similar opinions regarding their own social-emotional learning regarding academics. For example, both groups were equally likely to report having academic commitment and showed similar positive expectations for their futures. In addition, the greatest academic barriers reported by both groups of students during the pandemic focused on completing their schoolwork or homework, such as understanding their class assignments, staying motivated academically, and having reliable internet access.

Outcome Results

As part of our exploration of academic commitment, we asked both students and teachers about their perspectives of student learning during the 2020–2021 school year in comparison to before the pandemic. While the descriptive results revealed that the secondary students were more likely to have positive views of their learning during the pandemic, the elementary and secondary teachers who were surveyed tended to report that their students learned less. This result was particularly striking for those who completed hybrid/online surveys with only 40% of students but 75% of teachers reporting that learning was worse during the pandemic. It should be kept in mind, though, that we were not able to

compare the responses of students with their own teachers, and our teacher surveys targeted elementary schools as well, so this difference should be considered preliminary.

To further examine this issue, we created crosstabulations to look at the relationships between mode of learning, perceptions of learning, and the other major constructs within our conceptual framework (i.e., school context and teacher practices, social-emotional learning, and teacher supports). When looking specifically at the relationship between student perceptions of learning and school context, some of the most striking results focused on access to technology. For example, across the learning modes we found that students who had access to a laptop, desktop computer, or tablet were much more likely to have positive perceptions of learning than to report that they learned less. We found a similar relationship regarding class-time activities involving technology or digital devices and positive perceptions. Likewise, we found that a majority of the in-person and hybrid/online students showed positive relationships between their perceptions of learning and their self-reported respecting of students who identify as a different race or ethnicity than their own. Finally, we found that students showed some resiliency with about half of those in each group reporting that they confronted barriers to learning (e.g., internet access, motivation to do work, or finding time to do homework) still having positive perceptions of learning during the 2020–2021 school year.

In contrast to the students, the most pronounced relationships that we found for the teachers were negative. For example, we found that more than half of the in-person teachers reported giving personalized feedback to students on a regular basis but still thought that their students learned less than before the pandemic. This type of negative relationship between the outcome variable about student learning and school activities was even more pronounced for those who taught in a hybrid/online mode. This was particularly true for the hybrid/online teachers who reported regularly using digital media such as prerecorded lessons, short videos, and/or educational television or radio programs with their students.

Less surprising was the relationship that we found between hybrid/online teachers reported hours of PD and their perceptions of learning. That is, we found relationships between having less than 10 hours and some of the types of PD and hybrid/online teachers reporting that their students learned less during the pandemic. Despite this, hybrid/online teachers were also more likely to report negative perceptions of learning while still reporting that they collaborated with their colleagues to improve student engagement of learning and/or discuss the social-emotional needs of their students. It is also interesting to note that a majority of the hybrid/online teachers agreed that their training and experience was sufficient to integrate technology for effective teaching but still thought that their students learned less. In future work it would be helpful to disentangle teachers' positive self-perceptions with their negative perceptions of their students' outcomes.

Finally, some interesting results were found regarding the relationship between teachers' negative perceptions of student learning and their self-reports about social-emotional learning. More specifically, we found an inverse relationship with negative perceptions of learning and positive perceptions about students matching the racial diversity of the schools, with this relationship particularly predominant among the hybrid/online teachers. Among the in-person teachers we also found that at least half

reported negative perceptions of learning as well as regular barriers regarding keeping students engaged throughout the course and/or getting students to complete assignments. We also found that more than half of the hybrid/online teachers reported negative perceptions of learning and reported regular issues in managing their online classroom and/or in having a stable internet connection. Finally, we found a relationship between teachers' negative perceptions of learning and parent participation in school, with results particularly pronounced for the hybrid/online teachers.

Limitations and Significance

There are many more COVID-19-related questions that we wanted to include in our 2021 spring surveys. Unfortunately, we were limited in how many COVID-19-related questions we could add as we still needed to cover our MSAP-related questions and we wanted to limit the burden to students and teachers. Therefore, our study is not a dedicated COVID-19 survey study.

There are also many other analyses we could conduct. For example, we could focus on the magnet schools only, the magnet schools with both student and teacher surveys, only on schools with both inperson and hybrid responses, etc. We could also conduct additional analyses to compare student and teacher experiences at the magnet schools and at the non-magnet schools. When time allows, we may return to conduct some or all these analyses.

Additionally, we are now in the process of analyzing a new wave of student and teacher survey data we collected from 15 of the 23 magnet schools in spring 2022. The surveys have overlapping questions with the 2021 spring surveys. For the same schools that participated in both 2021 and 2022 survey administrations, we are analyzing the common questions to see how the experiences of students and teachers have changed or remained the same during the 2021–2022 school year.

COVID-19 changed the lives of K–12 students and teachers dramatically by forcing them to suddenly incorporate online learning and teaching. While there is existing literature on online learning and home schooling, little is known about the impact of changing mode of learning in K–12 public schools from in-person to online or hybrid. This report provides timely insights into teaching and learning during the pandemic from the perspectives of students and teachers at 23 magnet schools and eight non-magnet schools. This study also provides evidence for policymakers and educators of both successes and challenges experienced during the pandemic.

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Appendix A: Appendix Tables

Table A1
Selected Background Variables for Magnet Schools

Grantee	School	Grade span	Black student %	Hispanic student %	Free and reduced-price meals
Grantee 1	Magnet 1 ^a	K-5	21.4	52.3	66.4
Grantee 1	Magnet 2 ^a	9-12	23.8	69.2	85.0
Grantee 1	Magnet 3	6-8	11.2	80.9	88.6
Grantee 2	Magnet 4	K-5	0.0	67.0	62.1
Grantee 2	Magnet 5 ^a	K-6	0.8	90.6	83.9
Grantee 2	Magnet 6	K-6	0.3	58.0	46.2
Grantee 3	Magnet 7 ^a	6-8	20.5	60.0	66.4
Grantee 3	Magnet 8 ^a	6-8	25.3	51.4	63.5
Grantee 3	Magnet 9 ^a	6-8	10.5	69.9	61.1
Grantee 4	Magnet 10	PK			
Grantee 4	Magnet 11	6-12	26.4	44.2	65.8
Grantee 4	Magnet 12	7-12	21.8	52.9	73.6
Grantee 4	Magnet 13	6-12	49.9	24.1	61.5
Grantee 5	Magnet 14 ^b	6-8	7.4	22.9	62.5
Grantee 5	Magnet 15	6-8	18.0	37.5	66.3
Grantee 5	Magnet 16	6-8	17.9	36.1	73.5
Grantee 5	Magnet 17	9-12	20.6	56.1	73.2
Grantee 5	Magnet 18	K-5	13.9	41.6	63.8
Grantee 6	Magnet 19	PK-8	57.4	18.5	45.7
Grantee 6	Magnet 20	K-8	37.2	41.4	67.0
Grantee 6	Magnet 21 ^a	K-8	48.1	16.3	48.8
Grantee 6	Magnet 22	PK-8	71.7	14.0	68.2
Grantee 6	Magnet 23	9-12	38.9	48.3	75.1

Note. All data compiled from the NCES Common Core of Data (CCD; 2019–2020 and 2020–2021 school years), except the demographics for Magnet 14, which was drawn from their state website, and Magnet 10 which was not in the CCD dataset.

^a Data in the CCD dataset was limited to the overall school and not the magnet program.

Table A2

Teacher Responses to the Question: My Students Are Learning as Much or More Now as They Were Prior to the Pandemic. (Select one)

Grantee	School	Mode of learning	n	Strongly disagree	Disagree	Agree	Strongly agree
Grantee 1	Magnet 1	Hybrid	21	19	48	24	10
Grantee 1	Magnet 2	Hybrid	42	40	43	17	0
Grantee 1	Magnet 3	Hybrid	25	16	48	32	4
Grantee 2	Magnet 4	Hybrid	19	47	42	11	0
Grantee 2	Magnet 5	Hybrid	17	29	35	29	6
Grantee 2	Magnet 6	Hybrid	17	47	18	29	6
Grantee 3	Magnet 7	Hybrid	78	24	24	38	13
Grantee 3	Magnet 8	Hybrid	79	9	33	35	23
Grantee 3	Magnet 9	Hybrid	90	12	36	41	11
Grantee 4	Magnet 10	In-person	47	28	47	23	2
Grantee 4	Magnet 11	In-person	29	31	45	21	3
Grantee 4	Magnet 12	In-person	4	n/a	n/a	n/a	n/a
Grantee 4	Magnet 13	In-person	46	37	48	15	0
Grantee 5	Magnet 14	Hybrid	39	49	38	13	0
Grantee 5	Magnet 15	Hybrid	59	53	34	8	5
Grantee 5	Magnet 16	Hybrid	40	15	48	33	5
Grantee 5	Magnet 17	Hybrid	24	42	29	25	4
Grantee 5	Magnet 18	Hybrid	24	38	42	8	13

Note: NA we are not reporting results when N < 5.

Table A3
Student Responses to Question: How Much Have You Learned This School Year Compared to Before the COVID-19 Pandemic? (Select one)

Grantee	School	Mode of learning	n	Learned less	Learned about as much	Learned more
Grantee 1	Magnet 2	Hybrid	88	40	33	27
Grantee 1	Magnet 3	, Hybrid	47	53	32	15
Grantee 3	Magnet 7	Hybrid	117	36	41	23
Grantee 3	Magnet 7	In-person	151	35	36	28
Grantee 3	Magnet 8	Hybrid	172	41	34	24
Grantee 3	Magnet 8	In-person	183	36	37	27
Grantee 3	Magnet 9	Hybrid	140	29	49	21
Grantee 3	Magnet 9	In-person	230	36	45	20
Grantee 4	Magnet 10	Hybrid	50	36	42	22
Grantee 4	Magnet 10	In-person	35	34	51	14
Grantee 4	Magnet 11	Hybrid	21	48	38	14
Grantee 4	Magnet 11	In-person	32	22	50	28
Grantee 4	Magnet 13	Hybrid	56	36	45	20
Grantee 4	Magnet 13	In-person	25	44	36	20
Grantee 5	Magnet 14	Hybrid	50	40	42	18
Grantee 5	Magnet 14	In-person	8	38	38	25
Grantee 5	Magnet 15	Hybrid	207	41	36	23
Grantee 5	Magnet 15	In-person	46	46	30	24
Grantee 5	Magnet 16	Hybrid	152	36	38	26
Grantee 5	Magnet 16	In-person	28	46	36	18
Grantee 5	Magnet 18	Hybrid	78	44	33	23
Grantee 5	Magnet 18	In-person	38	24	47	29

Appendix B: Descriptions of Survey Constructs

School Context and Teacher Practices

Technology access examines the extent to which technology was used to facilitate communication and students' access to educational content. To measure this, we adapted the type of digital device used for schoolwork scale from the PISA Global Crisis Module student questionnaire (Bertling et al., 2020) that examines the type of technology used by students as well as the source of this technology.

Learning engagement experiences provides students' perspectives on class-time activities and barriers to learning to determine how their experiences changed because of the pandemic. As with the matching teacher construct, these items were drawn from the work of Martin and colleagues (2018), Gray and DiLoreto (2016), and the PISA Global Crisis Module scales on types of learning resources used and self-directed learning (Bertling et al., 2020).

This construct also draws upon two scales included in the PISA Global Crisis Module (Bertling et al., 2020). This includes the types of learning resources scale to measure how frequently students participated in educational activities outside of school time. It also includes the scale on students' feelings about learning at home to measure how students were coping during the pandemic.

Teaching activities and experiences provides teachers' insights into how they facilitated class-time activities, provided instruction, and responded to students, all of which are considered important aspects of instructor presence in online settings (Garrison et al., 2000; Martin et al., 2018), and to determine what technology-based adaptations were being made from normal classroom practices. These items were adapted from Martin and colleagues (2018) work on student perceptions of facilitation strategies in online courses, Gray and DiLoreto's (2016) items on instructor presence and learner interaction in online learning environments, and the *types of learning resources used while school was closed* scale from the PISA Global Crisis Module student questionnaire (Bertling et al., 2020).

This construct also drew upon the *problems with self-directed learning* scale from the PISA Global Crisis Module (Bertling et al., 2000). This was done to determine how barriers to teaching and learning, such as reliable technology access, were impacting teachers, an issue that could further perpetuate inequities for students (Richmond et al., 2020).

Social-Emotional Learning

Academic commitment and expectation measures students' perspectives on how hard they work and are willing to work in their classes. It also gathers their predictions about whether they will finish high school and attend college.

Intergroup relationships explores whether schools are promoting racial diversity and desegregation. As such, magnet students are asked how well their schools promote intergroup

relationships and share their personal attitudes on working with students from different racial or ethnic groups.

Student support measures teacher attitudes about two issues. First, we measure changes in their instructional practices from their school's normal instructional model using items from the California School Staff Survey, 2020-2021, Hybrid Only survey developed by the California Department of Education (2020). Second, we asked teachers about systemic reform using items on standards-based instruction that were drawn from the 2019 MSAP survey.

Student integration and parent support is designed to measure teachers' perspectives about intergroup relationships. More specifically, it asks teachers to identify how much emphasis their schools have placed on racial integration and whether there is interracial interaction among students. Since research suggests that parental involvement can have a positive effect on students' academic achievement (e.g., Cotton & Wikelund, 1989; Desimone, 1999; Henderson & Berla, 1994; Izzo et al., 1999; Reynolds, 1991; Walberg, 1984), this section also includes items to assess the extent of parental involvement in school-related activities.

Teacher Supports

Teacher professional development has been shown to change teachers' knowledge and beliefs, and their instructional practice (Loucks-Horsley & Matsumoto, 1999). Direct effects on student achievement for some types of professional development have also been found (Huffman et al., 2003). For this construct, we ask teachers to estimate how much time they spent on formal and informal professional development, such as those provided by their district or a mentor, and the time they spent getting trained in different content areas such as data-based decision making or differentiating instruction. Finally, they were asked their attitudes about the helpfulness of both these types of activities.

Teacher collaboration gathers information on "instructional guidance" or less formal types of teacher collaboration. In the literature, this construct is examined through the presence of professional communities (Bryk et al., 1999; Little, 1993; McLaughlin, 1993), which generally share three characteristics: (1) reflective dialogue among teachers about instructional practice and student learning, (2) derivatization of practice, and (3) shared collaboration (Bryk et al., 1999). Items were also adapted from the school closure support scale from the PISA Global Crisis Module school questionnaire (Bertling et al., 2020), which focused on mode of teacher collaboration. Finally, adapted versions of the 2019 MSAP survey items were included to assess how often teachers collaborated or discussed student assessment, lesson planning, student engagement, and social-emotional needs (see Wang et al., 2019).

Appendix C: Student Survey Descriptive Results

Table C1

During this school year, how did you attend school? (Select all that apply.)

Characteristics	In-Person	Hybrid
I attended in person at my school.	928	638

Table C2
Which of the following devices do you use most often for your [homework/schoolwork when you study and/or attend school from home]? (Please pick one.)

Characteristics	In-Person (n = 928)	Hybrid (n = 1485)
My own laptop, desktop computer, or tablet	26.9	24.3
My own smartphone	4.2	3.7
A laptop, desktop computer, or tablet that was also used by other family members	3.3	2.4
A smartphone that was also used by other family members	0.1	0.5
A laptop, desktop computer, or tablet that my school gave or lent me	63.1	68.6
I did not have an electronic device to use for my homework	2.3	0.5

Table C3
How often did you do the following activities during school time in a typical week?

Characteristics	n	Never	A few times	Every day or almost every day
a. I attended school in person while some of my classmates joined remotely. / I attended school remotely while some of my classmates attended school in person.				
In-Person	928	10.5	39.0	50.5
Hybrid	1286	16.8	40.4	42.8
b. I watched short videos made by my teacher(s).				
In-Person	928	26.6	60.6	12.8
Hybrid	1482	17.0	60.3	22.7
c. My teacher had us work in small groups or pairs. / I used breakout rooms with my classmates and teachers.				
In-Person	928	16.1	71.1	12.8
Hybrid	1481	24.4	60.4	15.1
 d. My classmates gave me feedback on my projects and/or homework assignments. 				
In-Person	928	27.0	53.2	19.7
Hybrid	1483	40.1	48.2	11.7

52

Table C4
How often did you do the following activities during school time in a typical week?

Characteristics	n	Never	A few times	Every day or almost every day
a. Watched or listened to pre-recorded lessons or other digital materials made by my teachers.				
In-Person	928	27.0	57.3	15.6
Hybrid	1484	16.7	61.6	21.7
b. Watched or listened to educational television or radio programs [during class].				
In-Person	928	31.6	54.3	14.1
Hybrid	1483	28.3	56.2	15.5
c. Worked with a tutor at school. / Attended real-time lessons with a tutor provided by school.				
In-Person	928	70.0	21.0	8.9
Hybrid	1484	74.7	17.7	7.7
d. Worked on digital textbooks, workbooks, or worksheets.				
In-Person	928	8.0	45.6	46.4
Hybrid	1484	16.7	61.6	21.7
e. Worked on paper textbooks, workbooks, or worksheets				
In-Person	928	10.7	58.5	30.8
Hybrid	1484	19.8	51.3	28.8

Table C5
How often did you do the following activities during school time in a typical week?

Characteristics	n	Never	A few times	Every day or almost every day
a. Attended tutoring lessons with an adult.				
In-Person	928	75.9	18.3	5.8
Hybrid	1482	78.3	18.1	3.6
b. Watched recorded lessons or other digital materials from other sources (such as Khan Academy and Coursera).				
In-Person	928	35.8	54.7	9.5
Hybrid	1485	31.2	56.0	12.9
c. Studied with my family members.				
In-Person	928	57.3	34.6	8.1
Hybrid	1484	59.8	34.3	5.9
d. Studied with my classmates/friends.				
In-Person	928	31.7	55.9	12.4
Hybrid	1483	45.2	45.4	9.4

Table C6

How often did you experience the following problems when completing your schoolwork in a typical week?

Characteristics	n	Never	A few	Every day or almost every day
a. Access to school supplies (paper, pencils, etc.)				
In-Person	928	24.1	33.4	42.5
Hybrid	1482	32.3	29.0	38.6
b. Access to a desktop computer, tablet, or smartphone when I needed it				
In-Person	928	26.9	22.1	51.0
Hybrid	1485	34.1	17.5	48.4
c. Internet access				
In-Person	928	18.9	22.0	59.2
Hybrid	1485	21.0	28.4	50.6
d. Finding a quiet place to [do homework/study]				
In-Person	928	23.0	45.0	32.0
Hybrid	1483	26.4	43.2	30.4
e. Finding someone who could help me with my [homework/schoolwork]				
In-Person	928	29.0	46.6	24.5
Hybrid	1485	30.2	44.8	24.9
f. Finding time to [do homework/study] because I had household responsibilities				
In-Person	928	21.9	48.7	29.4
Hybrid	1484	25.2	48.0	26.8
g. Having to help my parents or siblings when I should be [doing homework/studying]				
In-Person	928	28.4	45.4	26.2
Hybrid	1483	32.6	47.8	19.6
h. Motivating myself to do my [homework/ schoolwork]				
In-Person	928	21.1	44.9	32.0
Hybrid	1483	17.5	44.8	37.8
i. Understanding my [homework assignments/ schoolwork]				
In-Person	928	14.3	56.1	29.5
Hybrid	1485	11.3	57.1	31.6

Table C7

Please indicate to what extent you agree with the following statements.

Characteristics	n	Strongly disagree	Disagree	Agree	Strongly agree
a. At this school, no single racial/ethnic group is favored over another racial/ethnic group.					
In-Person	919	16.1	22.3	40.4	21.2
Hybrid	1469	9.0	16.1	43.9	31.0
 b. My school welcomes students from different racial/ethnic backgrounds. 					
In-Person	919	4.5	10.8	42.9	41.9
Hybrid	1468	2.9	5.2	47.3	44.6
c. My school teaches me to respect students from different racial/ethnic backgrounds.					
In-Person	919	6.1	13.1	46.0	34.8
Hybrid	1468	4.2	9.1	49.7	37.1
 d. My teachers know how to teach students of different racial/ethnic backgrounds. 					
In-Person	919	6.9	15.9	49.4	27.9
Hybrid	1469	3.7	10.1	52.1	34.0
e. My teachers use materials that represent different racial/ethnic backgrounds in class.					
In-Person	919	11.0	23.6	45.5	19.9
Hybrid	1468	6.2	20.7	49.6	23.5

Table C8

Please indicate to what extent you agree with the following statements.

		Strongly			Strongly
Characteristics	n	disagree	Disagree	Agree	agree
a. I feel comfortable being around students of other racial/ethnic groups.					
In-Person	911	7.8	4.7	36.7	50.8
Hybrid	1455	3.8	4.0	31.5	60.8
b. I know how to make friends with people of other racial/ethnic groups.					
In-Person	911	4.2	9.1	39.7	47.0
Hybrid	1456	3.0	6.5	37.4	53.1
c. I get along well with students of other racial/ethnic groups.					
In-Person	911	4.2	6.8	42.4	46.7
Hybrid	1456	2.6	4.4	38.2	54.8
d. I respect other people even if they are different from me.					
In-Person	911	3.3	4.4	33.5	58.8
Hybrid	1456	2.0	2.4	29.0	66.6
e. I try not to judge people based on their skin color.					
In-Person	911	4.7	5.0	26.5	63.8
Hybrid	1456	3.2	2.5	21.7	72.5
f. People with different skin color can still share similar values.					
In-Person	911	2.9	5.7	27.8	63.7
Hybrid	1456	1.7	3.0	22.8	72.5
g. All people are equal no matter what racial/ ethnic group they belong to.					
In-Person	911	5.8	4.2	23.1	67.0
Hybrid	1455	2.8	2.4	20.2	74.6

Table C9

Please indicate to what extent you agree with the following statements.

Characteristics	n	Strongly disagree	Disagree	Agree	Strongly agree
a. I always study for tests.					
In-Person	907	21.8	34.2	36.1	7.9
Hybrid	1444	16.3	40.7	36.7	6.3
b. I set aside time to do my homework.					
In-Person	907	15.3	31.8	42.4	10.5
Hybrid	1444	10.0	24.9	51.2	13.9
c. I work hard to do my best in my classes.					
In-Person	907	5.0	12.2	52.8	30.0
Hybrid	1445	3.7	12.5	56.5	27.2
d. If I do not do well on a test, I study harder.					
In-Person	907	12.2	30.9	40.7	16.2
Hybrid	1445	9.7	31.1	44.2	15.0
e. If I need to study, I do that before I relax or play.					
In-Person	907	16.3	32.2	38.7	12.8
Hybrid	1445	11.5	35.3	40.1	13.1
f. Good grades are important to me.					
In-Person	907	4.1	8.7	39.5	47.7
Hybrid	1445	3.6	7.0	39.2	50.2
g. Learning new things is important to me.					
In-Person	907	6.7	14.0	51.0	28.2
Hybrid	1445	4.8	13.8	51.7	29.7
h. Doing well in school is important for my future.					
In-Person	907	6.0	8.4	35.9	49.7
Hybrid	1445	3.5	6.2	37.5	52.7

Table C10
As things stand now, how far in school do you think you will get? (Please pick one.)

Characteristics	In-Person (<i>n</i> = 904)	Hybrid (n = 1443)
Never graduate from high school	4.9	4.4
Definitely graduate from high school	42.7	38.5
Attend college	52.4	57.1

Appendix D: Teacher Survey Descriptive Results

Table D1

During the academic year (2020–2021), how and where did you teach school most of the time?

Characteristics	In-Person	Hybrid
a. I simultaneously taught students in person at school and other students online.	424	496
b. I taught online from home.	n/a	12
c. I taught in person at school.	9	0
Total	433	508

Table D2

During the academic year (2020–2021), how did your students attend school? (Select all that apply.)

Characteristics	In-Person	Hybrid
a. All of my students attended online.	n/a	130
b. All of my students attended in person.	15	40
c. Some of my students attended in person while others attended online.	413	482
Total	428	522

Table D3

How often did you do the following activities with your students in a typical week?

Characteristics	n	Never	A few times	Every day or almost every day
a. I lectured during class. / I conducted online lectures for my students.				
In-Person	425	7.8	54.1	38.1
Hybrid	615	9.9	26.5	63.6
b. I made short videos for my students to watch.				
In-Person	425	28.5	57.2	14.4
Hybrid	614	20.2	54.6	25.2
c. I had my students work in small groups or pairs. / I used breakout rooms with my students.				
In-Person	425	16.5	57.9	25.6
Hybrid	613	29.5	44.9	25.6
d. I led [online] discussions.				
In-Person	425	2.1	51.5	46.4
Hybrid	614	5.5	28.3	66.1
e. I participated in my students' [online] discussions.				
In-Person	425	3.5	47.3	49.2
Hybrid	616	8.1	31.5	60.4
f. I gave personalized feedback to my students on their assignments/projects.				
In-Person	425	0.5	34.8	64.7
Hybrid	616	0.8	24.8	74.4
g. I had students give each other feedback on their projects and/or homework assignments.				
In-Person	425	24.0	56.5	19.
Hybrid	616	26.9	53.1	20.0
h. I responded to student questions [(via email, text, etc.) within one or two days].				
In-Person	425	0.0	8.5	91.5
Hybrid	616	0.8	9.9	89.3

Table D4

How often did you do the following activities with your students in a typical week?

Characteristics	n	Never	A few times	Every day or almost every day
a. Created pre-recorded lessons or other digital materials for students				
In-Person	425	29.2	43.5	27.3
Hybrid	616	18.2	44.3	37.5
b. Had students use digital textbooks, workbooks, or worksheets				
In-Person	425	7.3	34.6	58.1
Hybrid	615	7.5	27.8	64.7
c. Had students use paper textbooks, workbooks, or worksheets				
In-Person	425	39.3	48.0	12.7
Hybrid	615	27.8	38.7	33.5
d. Watched or listened to educational television or radio programs during class time				
In-Person	425	37.9	52.2	9.9
Hybrid	616	27.4	51.1	21.4

Table D5

Please mark the extent to which you agree or disagree with the following statements regarding whether they present challenges to your online instruction during a given week?

Characteristics	n	Never	A few times	Every day or almost every day
a. Access to a computer or tablet for teaching when I needed it				
In-Person	425	64.2	13.9	21.9
Hybrid	616	62.0	19.3	15.7
b. Access to a stable internet connection				
In-Person	425	43.5	33.4	23.1
Hybrid	616	26.9	49.0	20.9
c. Access to teaching supplies				
In-Person	425	54.6	25.6	19.8
Hybrid	616	39.8	38.6	19.8
d. Getting all my students to complete the course				
In-Person	425	10.8	45.6	43.5
Hybrid	615	3.6	42.9	45.9
e. Getting students to complete daily or weekly assignments				
In-Person	425	4.0	38.4	57.6
Hybrid	616	1.0	30.4	60.4
f. Helping students take responsibility for their work				
In-Person	425	7.5	36.5	56.0
Hybrid	615	1.5	34.3	58.7
g. Keeping students engaged throughout the course				
In-Person	425	8.0	45.2	46.8
Hybrid	616	2.9	40.4	52.1
h. Managing my [online] classroom				
In-Person	425	35.8	32.2	32.0
Hybrid	616	26.1	43.3	28.9
i. Setting course expectations				
In-Person	425	47.1	26.1	26.8
Hybrid	616	37.5	37.2	23.7

Table D6

During the 2020–2021 school year, approximately how many hours did you spend participating in the following activities?

Characteristics	n	0 hours	1-4 hours	5-9 hours	10-14 hours	15+ hours
a. Formal professional development sessions taught by an outside vendor						
In-Person	425	13.2	30.6	24.0	11.5	20.7
Hybrid	615	8.5	26.5	22.0	16.4	26.7
b. Formal professional development sessions taught by a teacher, coach, or administrator from my school						
In-Person	425	2.6	20.7	27.8	18.8	30.1
Hybrid	613	2.4	21.4	28.7	20.4	27.1
c. Met with a coach to work on instructional strategies						
In-Person	425	20.9	29.4	20.9	8.9	19.8
Hybrid	615	23.1	32.2	18.5	9.1	17.1
d. Met with other teachers in my school to work on instructional strategies						
In-Person	425	5.2	19.8	18.4	11.3	45.4
Hybrid	615	3.7	19.3	20.0	15.1	41.8
e. Met with other teachers to develop materials or activities for particular classes						
In-Person	425	7.5	18.1	14.8	14.8	44.7
Hybrid	615	5.7	21.8	19.2	15.8	37.6
f. Reviewed student assessment data with other teachers, coaches, or administrators to make instructional decisions						
In-Person	425	8.5	22.1	20.7	15.8	32.9
Hybrid	615	9.9	31.4	22.1	15.1	21.5

Table D7

During the 2020–2021 school year, approximately how many hours did you spend on the professional development activities listed below?

Characteristics	n	0 hours	1-4 hours	5-9 hours	10-14 hours	15+ hours
a. Alignment of curriculum content, assessment, and evaluation with state standards						
In-Person	425	6.8	24.9	18.8	16.7	32.7
Hybrid	613	8.8	33.4	25.4	13.9	18.4
b. Building social emotional competencies (e.g., self-management, relationships) into instruction						
In-Person	425	8.2	27.5	24.2	17.2	22.8
Hybrid	614	3.3	23.6	26.1	18.4	28.7
c. Content area teaching						
In-Person	425	8.7	18.6	19.1	10.6	43.1
Hybrid	615	8.8	21.3	22.0	13.3	34.6
d. Cooperative learning						
In-Person	425	13.4	24.7	24.5	14.8	22.6
Hybrid	615	19.8	30.6	21.5	12.7	15.4
e. Cultural competency, anti-racism, etc.						
In-Person	425	12.0	23.3	25.6	19.1	20.0
Hybrid	614	8.3	29.8	25.2	17.9	18.7
f. Data-based decision making (e.g., student assessment and evaluation)						
In-Person	425	8.0	28.5	19.1	18.1	26.4
Hybrid	614	12.2	33.9	26.1	14.0	13.8
g. Differentiated instruction (e.g., small group instruction, workshop model)						
In-Person	425	9.6	26.1	22.8	16.7	24.7
Hybrid	613	14.0	31.6	23.8	11.7	18.8
h. Project-based and/or inquiry-based teaching						
In-Person	425	11.1	31.3	23.3	15.3	19.1
Hybrid	614	20.4	28.7	23.3	11.4	16.3

Characteristics	n	0 hours	1-4 hours	5-9 hours	10-14 hours	15+ hours
i. Response To Intervention (RTI)						
In-Person	425	23.8	27.5	22.8	12.7	13.2
Hybrid	614	31.9	32.7	17.9	6.8	10.6
j. Teaching special student populations (e.g., English Language Development support)						
In-Person	425	20.5	26.1	19.3	10.1	24.0
Hybrid	614	19.4	34.9	22.1	6.4	17.3
k. Adapting instruction in case we move to online learning						
In-Person	425	14.6	27.1	18.8	14.6	24.9
Hybrid	614	6.2	19.	23.3	14.5	36.5
l. Developing instructional materials in case we move to online learning						
In-Person	425	16.0	26.1	18.1	15.1	24.7
Hybrid	615	6.3	20.0	20.7	13.7	39.3
m. Using technology for teaching purposes						
In-Person	425	6.8	21.4	16.9	13.9	40.9
Hybrid	615	3.3	19.7	21.5	12.4	43.3
n. Other professional development activities						
In-Person	425	25.9	18.1	18.8	13.4	23.8
Hybrid	579	31.8	19.2	19.2	8.3	21.6

Table D8

Please mark the extent to which you agree or disagree with each of the following statements regarding the professional development activities you participated in during the 2020–2021 school year.

The professional development activities I participated in helped me...

Characteristics	n	Strongly disagree	Disagree	Agree	Strongly agree
adeepen my content knowledge.					
In-Person	409	7.3	14.2	54.3	24.2
Hybrid	591	7.1	17.3	3.1	22.5
bdevelop lesson plans.					
In-Person	415	4.8	15.7	51.8	27.7
Hybrid	592	5.1	13.9	56.4	24.7
cimplement my classroom instruction and lesson plans.					
In-Person	417	4.3	11.8	55.2	28.8
Hybrid	599	3.7	10.5	61.3	24.5
dbetter maintain student engagement.					
In-Person	417	5.5	14.9	52.8	26.9
Hybrid	598	4.8	14.7	58.4	22.1
ebetter motivate my students to learn during the pandemic.					
In-Person	412	8.0	21.4	47.6	23.1
Hybrid	598	5.7	22.7	50.8	20.7
fbetter prepare my students for state/standardized tests this year.					
In-Person	402	9.5	17.9	51.0	21.6
Hybrid	536	15.5	36.0	37.9	10.6
gbetter communicate with parents from diverse linguistic, racial, and ethnic backgrounds.					
In-Person	406	9.4	26.1	44.6	20.0
Hybrid	572	7.5	26.9	48.8	16.8
hintervene more effectively when students are having trouble learning concepts or skills.					
In-Person	419	5.7	17.7	53.7	22.9
Hybrid	588	6.1	24.5	53.6	15.8

Characteristics	n	Strongly disagree	Disagree	Agree	Strongly agree
itake COVID-related safety measures to keep myself and my students healthy.					
In-Person	404	8.4	12.1	49.0	30.4
Hybrid	577	4.9	11.1	52.7	31.4
juse data to improve my teaching practice.					
In-Person	412	6.3	13.8	51.7	28.2
Hybrid	585	5.1	21.4	54.9	18.6
kuse technology to improve my instruction.					
In-Person	409	3.7	7.6	50.9	37.9
Hybrid	581	1.5	5.5	54.4	38.6
lwork with students from diverse racial and ethnic backgrounds.					
In-Person	400	4.0	11.5	51.8	32.8
Hybrid	573	4.9	16.2	52.5	26.4
mwork with students with diverse prior skill levels.					
In-Person	401	6.5	12.0	51.1	30.4
Hybrid	586	6.1	19.3	52.0	22.5

Table D9

Please mark the extent to which you agree or disagree with the following statements.

Characteristics	n	Never	Monthly to quarterly	A few times per month	Weekly
a. Analyzing student assessments or data with other teachers at my school					
In-Person	425	10.1	33.6	23.8	32.5
Hybrid	616	18.0	42.0	25.5	14.4
b. Developing or adapting lesson plans or units with other teachers at my school					
In-Person	425	12.9	19.8	21.4	45.9
Hybrid	616	15.1	30.0	21.1	33.8
 c. Discussing ideas about how to improve student engagement during online lessons. 					
In-Person	425	3.5	21.6	25.4	17.1
Hybrid	616	5.7	26.1	28.4	39.8
d. Discussing students' social emotional needs with other teachers or staff					
In-Person	425	5.4	21.2	30.8	42.6
Hybrid	615	3.3	20.2	27.8	48.8
e. [Online] platforms and tools for peer collaboration (e.g., online forums, discussion boards, professional communities)					
In-Person	425	15.1	28.2	27.3	29.4
Hybrid	616	12.5	34.4	29.1	24.0
f. Regular meetings with other teachers and staff at my school and/or district					
In-Person	425	1.6	15.3	22.6	60.5
Hybrid	616	2.1	17.0	26.5	54.4
g. Tools that help teachers develop instructional plans together (e.g., digital lesson planners, compiled resources, and guides offered by organizations)					
In-Person	425	10.8	28.0	28.0	33.2
Hybrid	616	14.0	32.8	26.9	26.3

Table D10

Please mark the extent to which you agree or disagree with the following statements.

Characteristics		Strongly	Disagrae	Agroo	Strongly
Characteristics	n	disagree	Disagree	Agree	agree
 a. I am giving students who need the most academic support the support they need during [the pandemic/online learning]. 					
In-Person	425	4.2	13.9	59.5	22.4
Hybrid	615	6.0	32.2	47.6	14.1
b. I am motivating my students during the pandemic.					
In-Person	425	1.9	9.4	62.4	26.4
Hybrid	616	1.8	12.8	63.6	21.8
c. I can provide effective instruction during [the pandemic/online learning].					
In-Person	425	3.8	13.6	59.3	23.3
Hybrid	615	4.6	22.8	54.0	18.7
d. I have had sufficient training and/or experience [to integrate technology for effective teaching/ using technology (video calls, learning management system, etc.) to deliver effective online teaching].					
In-Person	425	5.6	13.9	57.9	22.6
Hybrid	616	3.9	20.3	56.8	19.0
e. My students are engaged in class during the pandemic. / My students are as engaged in classes as they were during in-person classes.					
In-Person	425	6.4	23.3	55.8	14.6
Hybrid	616	33.1	39.9	22.2	4.7
f. My students are coping well with [learning during the pandemic/online learning].					
In-Person	425	8.0	32.2	47.8	12.0
Hybrid	615	16.3	41.8	37.2	4.7

Table D11
Please mark how often you did each of the following activities.

Characteristics	n	Never	Semesterly	Monthly	Weekly	Daily
a. I assess student progress toward learning goals.						
In-Person	425	0.2	0.9	12.9	49.6	36.2
Hybrid	615	0.5	4.6	16.9	50.6	27.5
b. I use assessment results to adapt instruction to meet student needs.						
In-Person	425	0.7	2.1	14.1	56.5	26.6
Hybrid	615	1.1	4.1	19.0	49.9	25.9
c. I re-teach topics because student performance on assignments or assessments did not meet high standards.						
In-Person	425	1.2	4.2	21.6	50.6	22.4
Hybrid	615	3.6	4.7	18.7	49.1	23.9

Table D12

Please mark the extent to which you agree or disagree with the following statements.

Characteristics	n	Strongly disagree	Disagree	Agree	Strongly agree
a. Students in my classes during the 2020–2021 school year represented a heterogeneous ability mix.					
In-Person	425	2.6	5.6	57.9	33.9
Hybrid	614	2.6	7.5	56.7	33.2
b. Students in my classes during the 2020–2021 school year represented the racial diversity of the school.					
In-Person	425	0.9	2.6	54.8	41.6
Hybrid	613	1.5	5.9	58.6	34.1

Table D13
For the students you taught this year, how many of their parents:

Characteristics	n	Few (0-20%)	Some (21-40%)	About half (41-60%)	Most (61-80%)	Nearly all (81-100%)
a. Attended parent teacher conferences?						
In-Person	425	53.2	22.8	10.1	7.8	6.1
Hybrid	611	38.8	19.5	12.3	15.2	14.2
b. Initiated communication (e.g., email, phone, Skype) to check on their child's progress?						
In-Person	425	47.1	31.8	8.7	8.0	4.5
Hybrid	611	32.9	34.9	13.6	11.5	7.2
c. Responded to my messages (emails, calls, texts) within one or two days?						
In-Person	425	28.5	30.1	12.2	17.2	12.0
Hybrid	611	15.4	23.2	18.3	24.7	18.3
d. Attended [online] school events?						
In-Person	425	64.0	20.2	8.0	4.7	3.1
Hybrid	611	42.7	32.6	13.7	7.5	3.4

Appendix E: Student Survey Outcome Results

Table E1

During this school year, how did you attend school? (Select all that apply.)

	school yea	In-Person: How much have you learned this school year compared to before the COVID-19 pandemic? (Please pick one.)					Hybrid : How much have you learned this school year compared to before the COVID-19 pandemic? (Please pick one.)				
Characteristics	n	Less	Same	More	n	Less	Same	More			
I attended in person at my school.	928	37.2	38.5	24.4	638	42.8	33.1	24.1			
Total	928	928 37.2 38.5 24.4					33.1	24.1			

Table E2
[In-Person] Which of the following devices do you use most often for your homework?
[Hybrid/Online] Which of the following devices do you use most often for your schoolwork when you study and/or attend school from home? (Please pick one.)

	school year compared to before the COVID-19 year compared to before				Hybrid : How much have you learned this year compared to before the COVID-pandemic? (Please pick one.)				
Characteristics	n	Less	Same	More	n	Less	Same	More	
My own laptop, desktop computer, or tablet	250	35.2	37.2	27.6	361	43.2	36.0	20.8	
My own smartphone	39	33.3	46.2	20.5	55	34.5	36.4	29.1	
A laptop, desktop computer, or tablet that was also used by other family members	31	41.9	25.8	32.3	36	44.4	33.3	22.2	
A smartphone that was also used by other family members	1	0.0	100.0	0.0	7	14.3	57.1	28.6	
A laptop, desktop computer, or tablet that my school gave or lent me	586	38.4	38.7	22.9	1019	39.5	38.7	21.9	
I did not have an electronic device to use for my homework	21	28.6	47.6	23.8	7	71.4	14.3	14.3	
Total	928	37.2	38.5	24.4	1485	40.3	37.8	21.9	

Table E3

How often did you do the following activities during school time in a typical week?

		How much hav ered to before (Please p	•		year co	mpared to b	you learned efore the CO' ease pick one	VID-19
Characteristics	n	Less	Same	More	n	Less	Same	More
a. I attended school in person while some of my classmates joined remotely. / I attended school remotely while some of my classmates attended school in person.								
Never	97	35.1	37.1	27.8	216	39.8	39.4	20.8
A few times	362	38.1	39.0	22.9	519	41.6	35.1	23.3
Every day or almost every day	469	36.9	38.4	24.7	551	38.7	40.3	21.1
Total	928	37.2	38.5	24.4	1286	40.0	38.0	21.9
b. I watched short videos made by my teacher(s).								
Never	247	40.1	37.2	22.7	252	45.2	35.7	19.0
A few times	562	36.8	39.0	24.2	893	41.0	38.0	21.1
Every day or almost every day	119	32.8	38.7	28.6	337	35.3	38.6	26.1
Total	928	37.2	38.5	24.4	1482	40.4	37.7	21.9
c. My teacher had us work in small groups or pairs. / I used breakout rooms with my classmates and teachers.								
Never	149	44.3	32.2	23.5	362	37.6	39.5	22.9
A few times	660	35.2	39.2	25.6	895	42.1	37.9	20.0
Every day or almost every day	119	39.5	42.0	18.5	224	38.4	34.4	27.2
Total	928	37.2	38.5	24.4	1481	40.4	37.7	21.8

		How much havared to before Please p	•		Hybrid: How much have you learned this syear compared to before the COVID-2 pandemic? (Please pick one.)			
Characteristics	n	Less	Same	More	n	Less	Same	More
d. My classmates gave me feedback on my projects and/or homework assignments.								
Never	251	43.4	35.1	21.5	595	46.9	35.3	17.8
A few times	494	34.4	40.1	25.5	715	36.9	39.7	23.4
Every day or almost every day	183	36.1	38.8	25.1	173	32.4	38.2	29.5
Total	928	37.2	38.5	24.4	1483	40.4	37.8	21.8

Table E4

How often did you do the following activities during school time in a typical week?

		How much have ered to before (Please p	the COVID-19		year co	Hybrid: How much have you learned th year compared to before the COVII pandemic? (Please pick one.)		
Characteristics	n	Less	Same	More	n	Less	Same	More
a. Watched or listened to pre-recorded lessons or other digital materials made by my teachers								
Never	251	39.8	36.7	23.5	248	48.4	33.5	18.1
A few times	532	37.2	38.9	23.9	914	40.6	38.7	20.7
Every day or almost every day	145	32.4	40.0	27.6	322	33.5	38.2	28.3
Total	928	37.2	38.5	24.4	1484	40.4	37.7	21.9
b. Watched or listened to educational television or radio programs [during class].								
Never	293	43.3	36.9	19.8	420	42.4	38.1	19.5
A few times	504	36.5	38.9	24.6	833	42.0	37.2	20.8
Every day or almost every day	131	26.0	40.5	33.6	230	30.9	39.1	30.0
Total	928	37.2	38.5	24.4	1483	40.4	37.8	21.8
c. Worked with a tutor at school. / Attended real-time lessons with a tutor provided by school.								
Never	650	38.8	37.4	23.8	1108	42.2	38.1	19.7
A few times	195	34.9	37.4	27.7	262	34.0	38.9	27.1
Every day or almost every day	83	30.1	49.4	20.5	114	36.8	31.6	31.6
Total	928	37.2	38.5	24.4	1484	40.4	37.7	21.9

		How much have ered to before Please p	•		year co	Hybrid: How much have you learned this year compared to before the COVID pandemic? (Please pick one.)			
Characteristics	n	Less	Same	More	n	Less	Same	More	
d. Worked on digital textbooks, workbooks, or worksheets									
Never	74	41.9	47.3	10.8	248	48.4	33.5	18.1	
A few times	432	40.2	35.7	24.1	914	40.6	38.7	20.7	
Every day or almost every day	431	33.4	39.7	26.9	322	33.5	38.2	28.3	
Total	928	37.2	38.5	24.4	1484	40.4	37.7	21.9	
e. Worked on paper textbooks, workbooks, or worksheets									
Never	99	37.4	44.4	18.2	294	46.9	35.4	17.7	
A few times	543	39.8	36.8	23.4	762	40.9	38.8	20.2	
Every day or almost every day	286	32.2	39.5	28.3	428	34.8	37.4	27.8	
Total	928	37.2	38.5	24.4	1484	40.4	37.7	21.9	

Table E5
How often did you do the following activities during school time in a typical week?

		How much have ered to before (Please p	•		year co	ompared to b	you learned efore the CO ease pick one	VID-19
Characteristics	n	Less	Same	More	n	Less	Same	More
a. Attended tutoring lessons with an adult								
Never	704	37.9	37.6	24.4	1161	41.9	38.9	19.2
A few times	170	35.9	40.6	23.5	268	35.8	34.3	29.9
Every day or almost every day	54	31.5	42.6	25.9	53	32.1	28.3	39.6
Total	928	37.2	38.5	24.4	1482	40.4	37.7	21.9
b. Watched recorded lessons or other digital materials from other sources (such as Khan Academy and Coursera)								
Never	332	42.5	34.6	22.9	463	43.6	38.9	17.5
A few times	508	34.6	41.7	23.6	831	40.2	37.2	22.6
Every day or almost every day	88	31.8	34.1	34.1	191	33.0	37.7	29.3
Total	928	37.2	38.5	24.4	1485	40.3	37.8	21.9
c. Studied with my family members								
Never	532	38.9	35.9	25.2	887	43.0	38.3	18.7
A few times	321	36.4	40.8	22.7	509	39.3	35.0	25.7
Every day or almost every day	75	28.0	46.7	25.3	88	20.5	47.7	31.8
Total	928	37.2	38.5	24.4	1484	40.4	37.7	21.9

		How much hav red to before (Please p	•		Hybrid: How much have you learned this s year compared to before the COVID-1 pandemic? (Please pick one.)			
Characteristics	n	Less	Same	More	n	Less	Same	More
d. Studied with my classmates/friends								
Never	294	36.7	38.1	25.2	670	43.3	37.6	19.1
A few times	519	38.9	38.0	23.1	673	40.4	37.0	22.6
Every day or almost every day	115	30.4	41.7	27.8	140	25.7	42.1	32.1
Total	928	37.2	38.5	24.4	1483	40.3	37.8	21.9

Table E6
How often did you experience the following problems when completing your schoolwork in a typical week?

		pared to before the COVID-19 pandemic? year compared to before the COVI				Hybrid: How much have you learned this year compared to before the COVID-pandemic? (Please pick one.)		
Characteristics	n	Less	Same	More	n	Less	Same	More
a. Access to school supplies (paper, pencils, etc.)								
Never	224	39.7	35.7	24.6	480	43.1	40.8	16.0
A few times	310	39.4	41.0	19.7	431	42.7	35.0	22.3
Every day or almost every day	394	34.0	38.1	27.9	573	36.1	37.3	26.5
Total	928	37.2	38.5	24.4	1484	40.3	37.8	21.9
b. Access to desktop computer, tablet, or smartphone when I needed it								
Never	250	37.2	38.4	24.4	507	44.4	38.9	16.8
A few times	205	41.5	35.6	22.9	260	40.8	36.5	22.7
Every day or almost every day	473	35.3	39.7	24.9	718	37.3	37.5	25.2
Total	928	37.2	38.5	24.4	1485	40.3	37.8	21.9
c. Internet access								
Never	175	41.7	34.9	23.4	312	41.0	40.7	18.3
A few times	204	42.2	37.3	20.6	421	46.6	37.3	16.2
Every day or almost every day	549	33.9	40.1	26.0	752	36.6	36.8	26.6
Total	928	37.2	38.5	24.4	1485	40.3	37.8	21.9

		How much have ered to before (Please p	the COVID-19		year co	Hybrid: How much have you learned this year compared to before the COVID-pandemic? (Please pick one.)			
Characteristics	n	Less	Same	More	n	Less	Same	More	
d. Finding a quiet place to [do homework/study]									
Never	213	40.8	31.9	27.2	392	42.3	38.3	19.4	
A few times	418	37.3	40.2	22.5	640	44.1	37.2	18.8	
Every day or almost every day	297	34.3	40.7	24.9	451	33.0	38.4	28.6	
Total	928	37.2	38.5	24.4	1483	40.3	37.8	21.9	
e. Finding someone who could help me with my [homework/schoolwork]									
Never	269	39.4	35.3	25.3	449	42.8	38.8	18.5	
A few times	432	38.4	37.7	23.8	666	44.3	36.9	18.8	
Every day or almost every day	227	32.2	43.6	24.2	370	30.3	38.1	31.6	
Total	928	37.2	38.5	24.4	1485	40.3	37.8	21.9	
f. Finding time to [do homework/study] because I had household responsibilities									
Never	203	41.9	33.0	25.1	374	43.0	37.2	19.8	
A few times	452	35.2	40.0	24.8	712	39.0	39.3	21.6	
Every day or almost every day	273	37.0	39.9	23.1	398	40.2	35.4	24.4	
Total	928	37.2	38.5	24.4	1484	40.4	37.7	21.9	

		How much hav ared to before (Please p	•		year co	ompared to b	e you learned before the CO ease pick one	VID-19
Characteristics	n	Less	Same	More	n	Less	Same	More
g. Having to help my parents or siblings when I should be [doing homework/ studying]								
Never	264	38.3	39.0	22.7	483	38.9	39.3	21.7
A few times	421	34.4	40.6	24.9	709	42.2	37.2	20.6
Every day or almost every day	243	40.7	34.2	25.1	291	38.5	36.8	24.7
Total	928	37.2	38.5	24.4	1483	40.4	37.8	21.8
h. Motivating myself to do my [homework/schoolwork]								
Never	214	46.3	32.2	21.5	259	42.5	35.5	22.0
A few times	417	33.3	41.7	24.9	664	38.7	41.7	19.6
Every day or almost every day	297	36.0	38.4	25.6	560	41.4	33.9	24.6
Total	928	37.2	38.5	24.4	1483	40.4	37.7	21.9
i. Understanding my [homework assignments/schoolwork]								
Never	133	41.4	32.3	26.3	168	38.1	42.3	19.6
A few times	521	41.1	40.1	18.8	848	43.8	35.7	20.5
Every day or almost every day	274	27.7	38.3	33.9	469	35.0	39.9	25.2
Total	928	37.2	38.5	24.4	1485	40.3	37.8	21.9

Table E7

Please indicate to what extent you agree with the following statements.

	school ye	on: How much ar compared to pandemic? (Ple	o before the	COVID-19	Hybrid: Ho year co			
Characteristics	n	Less	Same	More	n	Less	Same	More
a. At this school, no single racial/ethnic group is favored over another racial/ethnic group.								
Strongly Disagree	148	41.2	36.5	22.3	132	42.4	31.8	25.8
Disagree	205	45.4	34.1	20.5	237	45.6	30.8	23.6
Agree	371	32.9	42.0	25.1	645	40.2	40.3	19.5
Strongly Agree	195	33.3	37.4	29.2	455	36.9	39.6	23.5
Total	919	37.1	38.4	24.5	1469	40.2	37.8	22.0
 b. My school welcomes students from different racial/ethnic backgrounds. 								
Strongly Disagree	41	39.0	41.5	19.5	43	65.1	16.3	18.6
Disagree	99	45.5	35.4	19.2	76	32.9	38.2	28.9
Agree	394	39.3	37.6	23.1	695	42.3	38.6	19.1
Strongly Agree	385	32.5	39.7	27.8	654	37.2	38.4	24.5
Total	919	37.1	38.4	24.5	1468	40.2	37.8	22.0

	school ye	on: How much ar compared to pandemic? (Pl	to before the	COVID-19	Hybrid: How much have you learned this school year compared to before the COVID-19 pandemic? (Please pick one.)				
Characteristics	n	Less	Same	More	n	Less	Same	More	
c. My school teaches me to respect students from different racial/ethnic backgrounds.									
Strongly Disagree	56	48.2	33.9	17.9	61	47.5	23.0	29.5	
Disagree	120	50.0	35.8	14.2	133	50.4	31.6	18.0	
Agree	423	36.9	38.5	24.6	730	42.1	39.3	18.6	
Strongly Agree	320	30.6	40.0	29.4	544	34.4	39.0	26.7	
Total	919	37.1	38.4	24.5	1468	40.2	37.8	22.0	
d. My teachers know how to teach students of different racial/ethnic backgrounds.									
Strongly Disagree	63	46.0	30.2	23.8	55	52.7	18.2	29.1	
Disagree	146	46.6	30.8	22.6	149	43.6	36.9	19.5	
Agree	454	35.5	42.7	21.8	766	42.0	39.3	18.7	
Strongly Agree	256	32.4	37.1	30.5	499	35.1	37.9	27.1	
Total	919	37.1	38.4	24.5	1469	40.2	37.8	22.0	
e. My teachers use materials that represent different racial/ethnic backgrounds in class.									
Strongly Disagree	101	53.5	30.7	15.8	91	54.9	16.5	28.6	
Disagree	217	40.1	37.8	22.1	304	46.1	34.9	19.1	
Agree	418	34.2	41.1	24.6	728	39.3	41.1	19.6	
Strongly Agree	183	31.1	37.2	31.7	345	33.0	39.1	27.8	
Total	919	37.1	38.4	24.5	1468	40.2	37.8	22.0	

Table E8

How much have you learned this school year compared to before the COVID-19 pandemic? (Please pick one.)

	school ye	on: How much ar compared to pandemic? (Plo	to before the	COVID-19	Hybrid: How much have you learned this school year compared to before the COVID-19 pandemic? (Please pick one.)				
Characteristics	n	Less	Same	More	n	Less	Same	More	
a. I feel comfortable being around students of other racial/ethnic groups.									
Strongly Disagree	71	46.5	35.2	18.3	55	43.6	32.7	23.6	
Disagree	43	39.5	48.8	11.6	58	27.6	46.6	25.9	
Agree	334	35.3	42.2	22.5	458	35.2	43.4	21.4	
Strongly Agree	463	36.5	35.2	28.3	884	43.7	34.7	21.6	
Total	911	37.0	38.4	24.6	1455	40.3	37.9	21.8	
b. I know how to make friends with people of other racial/ethnic groups.									
Strongly Disagree	38	36.8	50.0	13.2	44	47.7	29.5	22.7	
Disagree	83	39.8	41.0	19.3	94	26.6	48.9	24.5	
Agree	362	36.2	41.2	22.7	545	37.4	41.1	21.5	
Strongly Agree	428	37.1	34.6	28.3	773	43.6	34.7	21.7	
Total	911	37.0	38.4	24.6	1456	40.3	37.8	21.8	

	school ye	on: How much ar compared pandemic? (Pl	to before the	COVID-19	Hybrid: How much have you learned this school year compared to before the COVID-19 pandemic? (Please pick one.)				
Characteristics	n	Less	Same	More	n	Less	Same	More	
c. I get along well with students of other racial/ethnic groups.									
Strongly Disagree	38	44.7	36.8	18.4	38	39.5	23.7	36.8	
Disagree	62	41.9	43.5	14.5	64	34.4	45.3	20.3	
Agree	386	33.9	41.5	24.6	556	35.6	44.2	20.1	
Strongly Agree	425	38.4	35.1	26.6	798	44.1	33.5	22.4	
Total	911	37.0	38.4	24.6	1456	40.3	37.8	21.8	
d. I respect other people even if they are different from me.									
Strongly Disagree	30	50.0	36.7	13.3	29	44.8	20.7	34.5	
Disagree	40	55.0	32.5	12.5	35	28.6	40.0	31.4	
Agree	305	35.4	43.6	21.0	422	35.8	45.5	18.7	
Strongly Agree	536	35.8	36.0	28.2	970	42.6	34.9	22.5	
Total	911	37.0	38.4	24.6	1456	40.3	37.8	21.8	
e. I try not to judge people based on their skin color.									
Strongly Disagree	43	39.5	32.6	27.9	47	40.4	36.2	23.4	
Disagree	46	41.3	37.0	21.7	37	29.7	37.8	32.4	
Agree	241	36.5	44.0	19.5	316	32.0	47.2	20.9	
Strongly Agree	581	36.7	36.7	26.7	1056	43.2	35.1	21.7	
Fotal	911	37.0	38.4	24.6	1456	40.3	37.8	21.8	

	school ye	on: How much ar compared to pandemic? (Plo	o before the	COVID-19	Hybrid: How much have you learned this scho year compared to before the COVID-19 pandemic? (Please pick one.)				
Characteristics	n	Less	Same	More	n	Less	Same	More	
f. People with different skin color can still share similar values.									
Strongly Disagree	26	50.0	34.6	15.4	25	60.0	4.0	36.0	
Disagree	52	48.1	32.7	19.2	43	32.6	39.5	27.9	
Agree	253	34.8	43.5	21.7	332	35.2	45.5	19.3	
Strongly Agree	580	36.4	36.9	26.7	1056	41.8	36.2	22.1	
Total	911	37.0	38.4	24.6	1456	40.3	37.8	21.8	
g. All people are equal no matter what racial/ethnic group they belong to.									
Strongly Disagree	53	49.1	32.1	18.9	41	41.5	29.3	29.3	
Disagree	38	42.1	44.7	13.2	35	31.4	40.0	28.6	
Agree	210	37.6	43.8	18.6	294	36.7	41.2	22.1	
Strongly Agree	610	35.4	36.7	27.9	1085	41.5	37.2	21.3	
Total	911	37.0	38.4	24.6	1455	40.3	37.9	21.9	

Table E9

How much have you learned this school year compared to before the COVID-19 pandemic? (Please pick one.)

	school ye	on: How much ear compared pandemic? (Pl	to before the	COVID-19	Hybrid: How much have you learned this school year compared to before the COVID-19 pandemic? (Please pick one.)					
Characteristics	n	Less	Same	More	n	Less	Same	More		
a. I always study for tests.										
Strongly Disagree	198	46.5	32.8	20.7	235	53.2	30.6	16.2		
Disagree	310	42.9	34.5	22.6	588	43.2	36.6	20.2		
Agree	327	29.1	45.6	25.4	530	31.9	43.2	24.9		
Strongly Agree	72	23.6	37.5	38.9	91	34.1	35.2	30.8		
Total	907	37.2	38.4	24.5	1444	40.1	38.0	22.0		
b. I set aside time to do my homework.										
Strongly Disagree	139	44.6	30.9	24.5	145	54.5	25.5	20.0		
Disagree	288	46.9	31.9	21.2	359	49.3	32.3	18.4		
Agree	385	30.1	46.0	23.9	739	35.9	41.8	22.3		
Strongly Agree	95	25.3	37.9	36.8	201	28.9	42.3	28.9		
Total	907	37.2	38.4	24.5	1444	40.1	37.9	22.0		
c. I work hard to do my best in my classes.										
Strongly Disagree	45	44.4	33.3	22.2	54	51.9	24.1	24.1		
Disagree	111	59.5	26.1	14.4	181	54.7	27.6	17.7		
Agree	479	38.2	40.9	20.9	817	40.6	40.4	19.0		
Strongly Agree	272	25.0	39.7	35.3	393	30.5	39.4	30.0		
Total	907	37.2	38.4	24.5	1445	40.1	37.9	22.0		

	school ye	on: How much ear compared to pandemic? (Pl	to before the	COVID-19	Hybrid: How much have you learned this school year compared to before the COVID-19 pandemic? (Please pick one.)				
Characteristics	n	Less	Same	More	n	Less	Same	More	
d. If I do not do well on a test, I study harder.									
Strongly Disagree	111	43.2	31.5	25.2	140	59.3	25.0	15.7	
Disagree	280	46.1	32.9	21.1	449	44.1	37.0	18.9	
Agree	369	32.5	45.3	22.2	639	37.1	42.1	20.8	
Strongly Agree	147	27.2	36.7	36.1	217	28.1	35.9	35.9	
Total	907	37.2	38.4	24.5	1445	40.1	37.9	22.0	
e. If I need to study, I do that before I relax or play.									
Strongly Disagree	148	48.6	29.1	22.3	166	57.2	27.1	15.7	
Disagree	292	41.4	38.0	20.5	510	45.5	36.3	18.2	
Agree	351	32.8	42.7	24.5	579	33.5	42.3	24.2	
Strongly Agree	116	25.0	37.9	37.1	190	30.5	38.4	31.1	
Total	907	37.2	38.4	24.5	1445	40.1	37.9	22.0	
f. Good grades are important to me.									
Strongly Disagree	37	43.2	32.4	24.3	52	53.8	25.0	21.2	
Disagree	79	57.0	32.9	10.1	101	44.6	36.6	18.8	
Agree	358	38.3	42.2	19.6	566	42.0	38.5	19.4	
Strongly Agree	433	32.1	36.7	31.2	726	36.9	38.6	24.5	
Total	907	37.2	38.4	24.5	1445	40.1	37.9	22.0	

	school ye	on: How much ar compared pandemic? (Pl	to before the	COVID-19	Hybrid: How much have you learned this schoo year compared to before the COVID-19 pandemic? (Please pick one.)				
Characteristics	n	Less	Same	More	n	Less	Same	More	
g. Learning new things is important to me.									
Strongly Disagree	61	42.6	37.7	19.7	69	53.6	29.0	17.4	
Disagree	127	55.1	33.1	11.8	200	49.5	31.5	19.0	
Agree	463	36.1	40.2	23.8	747	39.4	40.6	20.1	
Strongly Agree	256	28.9	37.9	33.2	429	34.7	37.8	27.5	
Total	907	37.2	38.4	24.5	1445	40.1	37.9	22.0	
h. Doing well in school is important for my future.									
Strongly Disagree	54	48.1	31.5	20.4	51	45.1	23.5	31.4	
Disagree	76	64.5	26.3	9.2	90	47.8	38.9	13.3	
Agree	326	34.4	43.9	21.8	542	41.0	39.7	19.4	
Strongly Agree	451	33.3	37.3	29.5	762	38.2	37.5	24.3	
Total	907	37.2	38.4	24.5	1445	40.1	37.9	22.0	

Table E10
As things stand now, how far in school do you think you will get? (Please pick one.)

	school yea	r compared	have you leato before the ease pick one	Hybrid : How much have you learned this school year compared to before the COVID-19 pandemic? (Please pick one.)				
Characteristics	n	Less	Same	More	n	Less	Same	More
Never graduate from high school	44	54.5	31.8	13.6	63	65.1	23.8	11.1
Definitely graduate from high school	386	41.2	37.6	21.2	556	38.1	41.2	20.7
Attend college	474	32.5	39.2	28.3	824	39.6	36.7	23.8
Total	904	1143	40.1	37.8	22			

Appendix F: Teacher Survey Outcome Results

Table F1

During the academic year (2020–2021), how and where did you teach school most of the time?

Characteristics		-	ents are lear were prior to	_		Hybrid : My students are learning as much or more now as they were prior to the pandemic					
	n	Strongly disagree	Disagree	Agree	Strongly agree	n	Strongly disagree	Disagree	Agree	Strongly agree	
a. I simultaneously taught students in person at school and other students online.	424	22.4	35.8	31.8	9.9	496	37.7	40.7	18.8	2.8	
b. I taught online from home.	n/a	n/a	n/a	n/a	n/a	12	33.3	58.3	8.3	0.0	
c. I taught in person at school.	9	44.4	22.2	22.2	11.1	0	0.0	0.0	0.0	0.0	

Table F2

During the academic year (2020–2021), how did your students attend school? (Select all that apply.)

	In-Person: My students are learning as much or more now as they were prior to the pandemic.						Hybrid: My students are learning as much or more now as they were prior to the pandemic					
Characteristics	n	Strongly disagree	Disagree	Agree	Strongly agree	n	Strongly disagree	Disagree	Agree	Strongly agree		
a. All of my students attended online.	n/a	n/a	n/a	n/a	n/a	130	36.9	43.8	16.2	3.1		
b. All of my students attended in person.	15	13.3	13.3	53.3	20.0	40	30.0	45.0	22.5	2.5		
c. Some of my students attended in person while others attended online.	413	22.5	36.6	31.2	9.7	482	38.4	40.9	18.3	2.5		

Table F3
How often did you do the following activities with your students in a typical week?

		•	ents are lear were prior to	_		Hybrid : My students are learning as much or more now as they were prior to the pandemic					
Characteristics	n	Strongly disagree	Disagree	Agree	Strongly agree	n	Strongly disagree	Disagree	Agree	Strongly agree	
a. I lectured during class. / I conducted online lectures for my students.											
Never	33	45.5	33.3	18.2	3.0	61	47.5	37.7	13.1	1.6	
A few times	230	19.6	41.3	29.6	9.6	163	35.8	38.9	21.5	3.8	
Every day or almost every day	162	21.6	29.0	37.7	11.7	391	35.8	38.9	21.5	3.8	
Total	425	22.4	36.0	31.8	9.9	615	36.1	41.3	19.7	2.9	
b. I made short videos for my students to watch.											
Never	121	26.4	34.7	28.9	9.9	124	40.3	39.5	15.3	4.8	
A few times	243	19.3	39.1	32.5	9.1	335	33.7	44.5	20.3	1.5	
Every day or almost every day	61	26.2	26.2	34.4	13.1	155	38.1	35.5	21.9	4.5	
Total	425	22.4	36.0	31.8	9.9	614	36.2	41.2	19.7	2.9	
c. I had my students work in small groups or pairs. / I used breakout rooms with my students.											
Never	70	31.4	32.9	25.7	10.0	181	40.9	38.1	19.9	1.1	
A few times	246	23.2	35.0	34.6	7.3	275	33.1	46.2	17.8	2.9	
Every day or almost every day	109	14.7	40.4	29.4	15.6	157	34.4	37.6	22.9	5.1	
Total	425	22.4	36.0	31.8	9.9	613	35.7	41.6	19.7	2.9	

	In-Person: My students are learning as much or more now as they were prior to the pandemic.						Hybrid : My students are learning as much or more now as they were prior to the pandemic					
Characteristics	n	Strongly disagree	Disagree	Agree	Strongly agree	n	Strongly disagree	Disagree	Agree	Strongly agree		
d. I led [online] discussions.												
Never	9	77.8	22.2	0.0	0.0	34	52.9	32.4	11.8	2.9		
A few times	219	21.9	39.7	27.4	11.0	174	34.5	48.3	16.1	1.1		
Every day or almost every day	197	20.3	32.5	38.1	9.1	406	35.2	39.2	21.9	3.7		
Total	425	22.4	36.0	31.8	9.9	614	36.0	41.4	19.7	2.9		
e. I participated in my students' [online] discussions.												
Never	15	60.0	20.0	20.0	0.0	50	48.0	34.0	14.0	4.0		
A few times	201	23.9	36.3	29.9	10.0	194	38.1	45.9	14.9	1.0		
Every day or almost every day	209	18.2	36.8	34.4	10.5	372	33.3	40.1	22.8	3.8		
Total	425	22.4	36.0	31.8	9.9	616	36.0	41.4	19.7	2.9		
f. I gave personalized feedback to my students on their assignments/ projects.												
Never	2	0.0	50.0	50.0	0.0	5	60.0	40.0	0.0	0.0		
A few times	148	20.9	37.2	35.1	6.8	153	33.3	51.0	15.7	0.0		
Every day or almost every day	275	23.3	35.3	29.8	11.6	458	36.7	38.2	21.2	3.9		
Total	425	22.4	36.0	31.8	9.9	616	36.0	41.4	19.6	2.9		

Characteristics	In-Person : My students are learning as much or more now as they were prior to the pandemic.					Hybrid : My students are learning as much or more now as they were prior to the pandemic				
	n	Strongly disagree	Disagree	Agree	Strongly agree	n	Strongly disagree	Disagree	Agree	Strongly agree
g. I had students give each other feedback on their projects and/or homework assignments.										
Never	102	29.4	40.2	25.5	4.9	166	43.4	41.0	13.9	1.8
A few times	240	20.4	35.8	35.0	8.8	327	36.4	43.7	18.3	1.5
Every day or almost every day	83	19.3	31.3	30.1	19.3	123	25.2	35.8	30.9	8.1
Total	425	22.4	36.0	31.8	9.9	616	36.0	41.4	19.6	2.9
h. I responded to student questions [(via email, text, etc.) within one or two days].										
Never	0	0.0	0.0	0.0	0.0	5	40.0	40.0	20.0	0.0
A few times	36	13.9	38.9	33.3	13.9	61	26.2	45.9	27.9	0.0
Every day or almost every day	389	23.1	35.7	31.6	9.5	550	37.1	40.9	18.7	3.3
Total	425	22.4	36.0	31.8	9.9	616	36.0	41.4	19.6	2.9

Table F4
How often did you do the following activities with your students in a typical week?

		•	ents are lear were prior to	_		-	•	nts are learni were prior to	•	
Characteristics	n	Strongly disagree	Disagree	Agree	Strongly agree	n	Strongly disagree	Disagree	Agree	Strongly agree
a. Created pre-recorded lessons or other digital materials for students										
Never	124	28.2	36.3	27.4	8.1	112	38.4	41.1	14.3	6.3
A few times	185	17.8	35.1	34.6	12.4	273	37.0	40.3	20.5	2.2
Every day or almost every day	116	23.3	37.1	31.9	7.8	231	33.8	42.9	21.2	2.2
Total	425	22.4	36.0	31.8	9.9	616	36.0	41.4	19.6	2.9
b. Had students use digital textbooks, workbooks, or worksheets										
Never	31	12.9	38.7	29.0	19.4	46	37.0	45.7	15.2	2.2
A few times	147	19.0	32.7	38.1	10.2	171	33.3	45.6	17.5	3.5
Every day or almost every day	247	25.5	37.7	28.3	8.5	398	37.2	38.9	21.1	2.8
Total	425	22.4	36.0	31.8	9.9	615	36.1	41.3	19.7	2.9
c. Had students use paper textbooks, workbooks, or worksheets										
Never	167	28.7	41.9	22.8	6.6	171	37.4	41.5	19.9	1.2
A few times	204	20.1	33.3	36.3	10.3	238	38.7	39.5	17.6	4.2
Every day or almost every day	54	11.1	27.8	42.6	18.5	206	31.6	43.7	21.8	2.9
Total	425	22.4	36.0	31.8	9.9	615	35.9	41.5	19.7	2.9

		•	ents are lear were prior to	_		Hybrid : My students are learning as much or more now as they were prior to the pandemic						
Characteristics	n	Strongly disagree	Disagree	Agree	Strongly agree	n	Strongly disagree	Disagree	Agree	Strongly agree		
d. Watched or listened to educational television or radio programs during class time												
Never	161	24.2	37.9	31.1	6.8	169	37.9	45.0	14.8	2.4		
A few times	222	21.2	33.8	33.8	11.3	315	34.3	42.2	21.3	2.2		
Every day or almost every day	42	21.4	40.5	23.8	14.3	132	37.9	34.8	22.0	5.3		
Total	425	22.4	36.0	31.8	9.9	616	36.0	41.4	19.6	2.9		

Table F5

Please mark the extent to which you agree or disagree with the following statements regarding whether they present challenges to your online instruction during a given week?

		· ·	ents are lear were prior to	_		=	-	nts are learni were prior to	_	
Characteristics	n	Strongly disagree	Disagree	Agree	Strongly agree	n	Strongly disagree	Disagree	Agree	Strongly agree
a. Access to a computer or tablet for teaching when I needed it										
Never	273	23.8	39.6	27.8	8.8	330	40.3	40.9	17.0	1.8
A few times	59	28.8	35.6	33.9	1.7	97	49.5	50.4	13.4	4.1
Every day or almost every day	93	14.0	25.8	41.9	18.3	81	32.1	36.1	30.9	4.9
Total	425	22.4	36.0	31.8	9.9	508	41.1	41.4	18.5	2.8
b. Access to a stable internet connection										
Never	185	20.0	40.0	29.7	10.3	140	42.1	41.4	15.0	1.4
A few times	142	31.0	34.5	30.3	4.2	269	36.8	44.2	17.1	1.9
Every day or almost every day	98	14.3	30.6	37.8	17.3	99	33.3	32.3	27.3	7.1
Total	425	22.4	36.0	31.8	9.9	508	37.6	41.1	18.5	2.8
c. Access to teaching supplies										
Never	232	22.0	40.5	28.4	9.1	223	39.5	43.0	16.1	1.3
A few times	109	31.2	31.2	32.1	5.5	196	36.2	41.3	18.9	3.6
Every day or almost every day	84	11.9	29.8	40.5	17.9	89	36.0	36.0	23.6	4.5
Total	425	22.4	36.0	31.8	9.9	508	37.6	41.1	18.5	2.8

		•	ents are lear were prior to	_		-	•	nts are learni were prior to	•	
Characteristics	n	Strongly disagree	Disagree	Agree	Strongly agree	n	Strongly disagree	Disagree	Agree	Strongly agree
d. Getting all my students to complete the course										
Never	46	17.4	19.6	37.0	26.1	21	23.8	47.6	23.8	4.8
A few times	194	18.6	42.3	31.4	7.7	249	27.3	48.6	20.9	3.2
Every day or almost every day	185	27.6	33.5	30.8	8.1	238	49.6	32.8	15.5	2.1
Total	425	22.4	36.0	31.8	9.9	508	37.6	41.1	18.5	2.8
e. Getting students to complete daily or weekly assignments										
Never	17	0.0	11.8	41.2	47.1	6	0.0	50.0	33.3	16.7
A few times	163	15.3	40.5	34.4	9.8	172	22.1	51.7	23.3	2.9
Every day or almost every day	245	28.6	34.7	29.4	7.3	330	46.4	35.5	15.8	2.4
Total	425	22.4	36.0	31.8	9.9	508	37.6	41.1	18.5	2.8
f. Helping students take responsibility for their work										
Never	32	9.4	31.3	34.4	25.0	8	12.5	25.0	50.0	12.5
A few times	155	17.4	41.9	31.0	9.7	198	26.8	50.5	19.7	3.0
Every day or almost every day	238	27.3	32.8	31.9	8.0	302	45.4	35.4	16.9	2.3
Total	425	22.4	36.0	31.8	9.9	508	37.6	41.1	18.5	2.8

		-	ents are lear were prior to	_		-	•	nts are learni were prior to	•	
Characteristics	n	Strongly disagree	Disagree	Agree	Strongly agree	n	Strongly disagree	Disagree	Agree	Strongly agree
g. Keeping students engaged throughout the course										
Never	34	0.0	20.6	35.3	44.1	17	23.5	29.4	35.3	11.8
A few times	192	19.8	43.2	31.3	5.7	228	27.6	50.4	19.3	2.6
Every day or almost every day	199	28.6	31.7	31.7	8.0	263	47.1	33.8	16.7	2.3
Total	425	22.4	36.0	31.8	9.9	508	37.6	41.1	18.5	2.8
h. Managing my classroom										
Never	152	21.7	40.8	23.0	14.5	146	34.2	40.4	22.6	2.7
A few times	137	24.1	38.7	35.0	2.2	212	34.4	49.1	15.1	1.4
Every day or almost every day	136	21.3	27.9	38.2	12.5	150	45.3	30.7	19.3	4.7
Total	425	22.4	36.0	31.8	9.9	508	37.6	41.1	18.5	2.8
i. Setting course expectations										
Never	200	21.5	37.5	28.5	12.5	208	36.1	41.3	20.2	2.4
A few times	111	27.9	43.2	27.9	0.9	184	39.7	44.0	15.2	1.1
Every day or almost every day	114	18.4	26.3	41.2	14.0	116	37.1	36.2	20.7	6.0
Total	425	22.4	36.0	31.8	9.9	508	37.6	41.1	18.5	2.8

Table F6

During the 2020–2021 school year, approximately how many hours did you spend participating in the following activities?

		•	ents are lear were prior to	-		-	•	nts are learni were prior to	_	
Characteristics	n	Strongly disagree	Disagree	Agree	Strongly agree	n	Strongly disagree	Disagree	Agree	Strongly agree
a. Formal professional development sessions taught by an outside vendor										
0 hours	56	26.8	26.8	33.9	12.5	52	46.2	30.8	19.2	3.8
1-4 hours	130	18.5	39.2	32.3	10.0	163	42.3	41.7	13.5	2.5
5-9 hours	102	24.5	38.2	34.3	2.9	135	34.8	42.2	21.5	1.5
10-14 hours	49	16.3	42.9	32.7	8.2	101	28.7	40.6	27.7	3.0
15+ hours	88	26.1	30.7	26.1	17.0	164	32.3	43.9	19.5	4.3
Total	425	22.4	36.0	31.8	9.9	615	36.1	41.3	19.7	2.9
b. Formal professional development sessions taught by a teacher, coach, or administrator from my school										
0 hours	11	18.2	9.1	63.6	9.1	15	60.0	26.7	13.3	0.0
1-4 hours	88	23.9	37.5	31.8	6.8	131	42.0	42.0	15.3	0.8
5-9 hours	118	26.3	33.9	32.2	7.6	176	31.8	44.3	19.3	4.5
10-14 hours	80	23.8	37.5	32.5	6.3	125	32.0	41.6	24.0	2.4
15+ hours	128	17.2	38.3	28.1	16.4	166	37.3	38.6	20.5	3.6
Total	425	22.4	36.0	31.8	9.9	613	36.2	41.3	19.6	2.9

		•	ents are lear were prior to	_		-	•	nts are learni were prior to	•		
Characteristics	n	Strongly disagree	Disagree	Agree	Strongly agree	n	Strongly disagree	Disagree	Agree	Strongly agree	
c. Met with a coach to work on instructional strategies											
0 hours	89	29.2	40.4	23.6	6.7	142	50.0	38.7	9.9	1.4	
1-4 hours	125	24.0	41.6	25.6	8.8	198	32.3	48.0	17.2	2.5	
5-9 hours	89	24.7	27.0	40.4	7.9	114	30.7	37.7	28.1	3.5	
10-14 hours	38	13.2	42.1	39.5	5.3	56	33.9	35.7	28.6	1.8	
15+ hours	84	14.3	29.8	36.9	19.0	105	31.4	39.0	23.8	5.7	
Total	425	22.4	36.0	31.8	9.9	615	36.1	41.3	19.7	2.9	
d. Met with other teachers in my school to work on instructional strategies											
0 hours	22	40.9	27.3	22.7	9.1	23	26.1	43.5	30.4	0.0	
1-4 hours	84	27.4	44.0	23.8	4.8	119	38.7	43.7	15.1	2.5	
5-9 hours	78	19.2	38.5	34.6	7.7	123	31.7	44.7	21.1	2.4	
10-14 hours	48	18.8	35.4	41.7	4.2	93	33.3	45.2	18.3	3.2	
15+ hours	193	20.2	32.6	32.6	14.5	257	38.9	37.0	20.6	3.5	
Total	425	22.4	36.0	31.8	9.9	615	36.1	41.3	19.7	2.9	

		•	ents are lear were prior to	-		-	•	nts are learni were prior to	_		
Characteristics	n	Strongly disagree	Disagree	Agree	Strongly agree	n	Strongly disagree	Disagree	Agree	Strongly agree	
e. Met with other teachers to develop materials or activities for particular classes											
0 hours	32	43.8	31.3	18.8	6.3	35	37.1	42.9	17.1	2.9	
1-4 hours	77	23.4	42.9	28.6	5.2	134	40.3	40.3	18.7	0.7	
5-9 hours	63	20.6	46.0	27.0	6.3	118	35.6	43.2	17.8	3.4	
10-14 hours	63	19.0	30.2	39.7	11.1	97	27.8	50.5	16.5	5.2	
15+ hours	190	20.0	32.6	34.2	13.2	231	37.2	36.8	22.9	3.0	
Total	425	22.4	36.0	31.8	9.9	615	36.1	41.3	19.7	2.9	
f. Reviewed student assessment data with other teachers, coaches, or administrators to make instructional decisions											
0 hours	36	41.7	38.9	19.4	0.0	61	47.5	41.0	11.5	0.0	
1-4 hours	94	21.3	40.4	30.9	7.4	193	43.0	40.9	14.5	1.6	
5-9 hours	88	22.7	34.1	33.0	10.2	136	30.1	45.6	21.3	2.9	
10-14 hours	67	20.9	35.8	37.3	6.0	93	26.9	43.0	23.7	6.5	
15+ hours	140	18.6	33.6	32.1	15.7	132	33.3	36.4	26.5	3.8	
Total	425	22.4	36.0	31.8	9.9	615	36.1	41.3	19.7	2.9	

Table F7

During the 2020–2021 school year, approximately how many hours did you spend on the professional development activities listed below?

		•	ents are lear were prior to	•		-	•	nts are learni were prior to	_		
Characteristics	n	Strongly disagree	Disagree	Agree	Strongly agree	n	Strongly disagree	Disagree	Agree	Strongly agree	
a. Alignment of curriculum content, assessment, and evaluation with state standards											
0 hours	29	55.2	17.2	27.6	0.0	54	53.7	38.9	7.4	0.0	
1-4 hours	106	25.5	40.6	26.4	7.5	205	38.5	42.9	16.1	2.4	
5-9 hours	80	23.8	43.8	31.3	1.3	156	34.6	42.9	19.9	2.6	
10-14 hours	71	14.1	38.0	35.2	12.7	85	27.1	48.2	22.4	2.4	
15+ hours	139	16.5	30.9	35.3	17.3	113	31.0	33.6	29.2	6.2	
Total	425	22.4	36.0	31.8	9.9	613	35.9	41.6	19.6	2.9	
b. Building social emotional competencies (e.g., self-management, relationships) into instruction											
0 hours	35	37.1	37.1	22.9	2.9	20	50.0	35.0	15.0	0.0	
1-4 hours	117	28.2	41.0	26.5	4.3	145	42.1	44.8	10.3	2.8	
5-9 hours	103	18.4	39.8	37.9	3.9	160	36.9	45.0	15.6	2.5	
10-14 hours	73	20.5	37.0	28.8	13.7	113	35.4	43.4	21.2	0.0	
15+ hours	97	15.5	24.7	37.1	22.7	176	28.4	35.2	30.7	5.7	
Total	425	22.4	36.0	31.8	9.9	614	35.8	41.5	19.7	2.9	

		•	ents are lear were prior to	-		-	•	nts are learni were prior to	•	
Characteristics	n	Strongly disagree	Disagree	Agree	Strongly agree	n	Strongly disagree	Disagree	Agree	Strongly agree
c. Content area teaching										
0 hours	37	48.6	32.4	18.9	0.0	54	55.6	33.3	9.3	1.9
1-4 hours	79	19.0	44.3	31.6	5.1	131	40.5	45.0	12.2	2.3
5-9 hours	81	24.7	34.6	37.0	3.7	135	37.8	40.0	20.7	1.5
10-14 hours	45	20.0	40.0	33.3	6.7	82	29.3	52.4	15.9	2.4
15+ hours	183	18.0	32.8	31.7	17.5	213	29.6	38.0	27.7	4.7
Total	425	22.4	36.0	31.8	9.9	615	35.9	41.5	19.7	2.9
d. Cooperative learning										
0 hours	57	47.4	29.8	21.1	1.8	122	48.4	41.8	8.2	1.6
1-4 hours	105	24.8	38.1	32.4	4.8	188	39.4	43.6	14.4	2.7
5-9 hours	104	18.3	42.3	33.7	5.8	132	31.8	44.7	22.7	0.8
10-14 hours	63	19.0	38.1	33.3	9.5	78	21.8	50.0	24.4	3.8
15+ hours	96	11.5	29.2	34.4	25.0	95	30.5	25.3	36.8	7.4
Total	425	22.4	36.0	31.8	9.9	615	35.9	41.5	19.7	2.9
e. Cultural competency, anti-racism, etc.										
0 hours	51	39.2	31.4	23.5	5.9	51	52.9	41.2	5.9	0.0
1-4 hours	99	24.2	43.4	28.3	4.0	183	41.0	40.4	15.8	2.7
5-9 hours	109	17.4	35.8	41.3	5.5	155	32.3	47.1	18.7	1.9
10-14 hours	81	14.8	43.2	28.4	13.6	110	30.0	47.3	20.9	1.8
15+ hours	85	23.5	23.5	31.8	21.2	115	30.4	30.4	32.2	7.0
Total	425	22.4	36.0	31.8	9.9	614	35.8	41.5	19.7	2.9

		•	ents are lear were prior to	-		-	•	nts are learni were prior to	•		
Characteristics	n	Strongly disagree	Disagree	Agree	Strongly agree	n	Strongly disagree	Disagree	Agree	Strongly agree	
f. Data-based decision making (e.g., student assessment and evaluation)											
0 hours	34	47.1	32.4	17.6	2.9	75	50.7	41.3	6.7	1.3	
1-4 hours	121	24.8	43.0	28.1	4.1	208	41.8	42.8	13.9	1.4	
5-9 hours	81	14.8	35.8	43.2	6.2	160	31.9	41.9	23.1	3.1	
10-14 hours	77	27.3	29.9	32.5	10.4	86	20.9	47.7	26.7	4.7	
15+ hours	112	14.3	33.9	31.3	20.5	85	31.8	30.6	31.8	5.9	
Total	425	22.4	36.0	31.8	9.9	614	36.0	41.4	19.7	2.9	
g. Differentiated instruction (e.g., small group instruction, workshop model)											
0 hours	41	56.1	22.0	17.1	4.9	86	47.7	43.0	8.1	1.2	
1-4 hours	111	22.5	45.0	27.0	5.4	194	37.1	49.0	12.9	1.0	
5-9 hours	97	16.5	43.3	38.1	2.1	146	34.9	39.0	23.3	2.7	
10-14 hours	71	25.4	29.6	33.8	11.3	72	26.4	33.3	34.7	5.6	
15+ hours	105	12.4	29.5	35.2	22.9	115	32.2	35.7	26.1	6.1	
Total	425	22.4	36.0	31.8	9.9	613	35.9	41.4	19.7	2.9	

		-	ents are lear were prior to	_		Hybrid : My students are learning as much or more now as they were prior to the pandemic						
Characteristics	n	Strongly disagree	Disagree	Agree	Strongly agree	n	Strongly disagree	Disagree	Agree	Strongly agree		
h. Project-based and/or inquiry-based teaching												
0 hours	47	51.1	25.5	17.0	6.4	125	48.0	43.2	7.2	1.6		
1-4 hours	133	25.6	42.1	27.8	4.5	176	38.1	45.5	14.8	1.7		
5-9 hours	99	17.2	39.4	39.4	4.0	143	30.8	41.3	25.9	2.1		
10-14 hours	65	12.3	33.8	41.5	12.3	70	28.6	38.6	25.7	7.1		
15+ hours	81	14.8	29.6	29.6	25.9	100	30.0	35.0	30.0	5.0		
Total	425	22.4	36.0	31.8	9.9	614	36.0	41.5	19.5	2.9		
i. Response To Intervention (RTI)												
0 hours	101	42.6	32.7	19.8	5.0	196	45.9	42.3	10.7	1.0		
1-4 hours	117	16.2	42.7	35.9	5.1	201	34.3	46.3	16.9	2.5		
5-9 hours	97	20.6	39.2	35.1	5.2	110	30.9	37.3	30.0	1.8		
10-14 hours	54	11.1	33.3	38.9	16.7	42	33.3	38.1	21.4	7.1		
15+ hours	56	12.5	25.0	32.1	30.4	65	21.5	33.8	35.4	9.2		
Total	425	22.4	36.0	31.8	9.9	614	36.0	41.5	19.5	2.9		

		•	ents are lear were prior to	-		-	•		_	as much or more he pandemic		
Characteristics	n	Strongly disagree	Disagree	Agree	Strongly agree	n	Strongly disagree	Disagree	Agree	Strongly agree		
j. Teaching special student populations (e.g., English Language Development support)												
0 hours	87	39.1	35.6	19.5	5.7	119	39.5	48.7	10.9	0.8		
1-4 hours	111	17.1	45.9	31.5	5.4	214	42.1	43.0	13.6	1.4		
5-9 hours	82	26.8	29.3	41.5	2.4	136	23.5	47.1	28.7	0.7		
10-14 hours	43	11.6	30.2	37.2	20.9	39	30.8	33.3	20.5	15.4		
15+ hours	102	14.7	33.3	32.4	19.6	106	36.8	26.4	30.2	6.6		
Total	425	22.4	36.0	31.8	9.9	614	35.8	41.5	19.7	2.9		
k. Adapting instruction in case we move to online learning												
0 hours	62	43.5	32.3	19.4	4.8	38	55.3	39.5	5.3	0.0		
1-4 hours	115	20.9	41.7	33.0	4.3	120	39.2	46.7	12.5	1.7		
5-9 hours	80	20.0	32.5	42.5	5.0	143	31.5	46.2	19.6	2.8		
10-14 hours	62	14.5	45.2	24.2	16.1	89	38.2	40.4	19.1	2.2		
15+ hours	106	17.9	29.2	34.0	18.9	224	33.0	36.2	26.3	4.5		
Total	425	22.4	36.0	31.8	9.9	614	36.0	41.4	19.7	2.9		

		•	ents are lear were prior to	-		-	•	nts are learni were prior to	-	
Characteristics	n	Strongly disagree	Disagree	Agree	Strongly agree	n	Strongly disagree	Disagree	Agree	Strongly agree
I. Developing instructional materials in case we move to online learning										
0 hours	68	44.1	32.4	20.6	2.9	39	53.8	35.9	7.7	2.6
1-4 hours	111	18.9	40.5	34.2	6.3	123	39.0	47.2	11.4	2.4
5-9 hours	77	16.9	33.8	44.2	5.2	127	37.0	45.7	16.5	0.8
10-14 hours	64	18.8	42.2	23.4	15.6	84	36.9	44.0	14.3	4.8
15+ hours	105	18.1	31.4	32.4	18.1	242	30.6	36.4	29.3	3.7
Total	425	22.4	36.0	31.8	9.9	615	35.9	41.5	19.7	2.9
m. Using technology for teaching purposes										
0 hours	29	44.8	24.1	20.7	10.3	20	50.0	40.0	10.0	0.0
1-4 hours	91	24.2	36.3	35.2	4.4	121	43.0	42.1	12.4	2.5
5-9 hours	72	18.1	38.9	38.9	4.2	132	40.2	43.9	15.2	0.8
10-14 hours	59	20.3	35.6	33.9	10.2	76	36.8	52.6	10.5	0.0
15+ hours	174	20.1	36.8	28.2	14.9	266	29.3	36.8	28.6	5.3
Total	425	22.4	36.0	31.8	9.9	615	35.9	41.5	19.7	2.9

		•	ents are lear were prior to	•		Hybrid : My students are learning as much or more now as they were prior to the pandemic					
Characteristics	n	Strongly disagree	Disagree	Agree	Strongly agree	n	Strongly disagree	Disagree	Agree	Strongly agree	
n. Other professional development activities											
0 hours	110	33.6	32.7	30.0	3.6	184	39.7	43.5	14.1	2.7	
1-4 hours	77	20.8	40.3	29.9	9.1	111	50.5	33.3	13.5	2.7	
5-9 hours	80	13.8	40.0	40.0	6.3	111	28.8	47.7	22.5	0.9	
10-14 hours	57	24.6	31.6	31.6	12.3	48	20.8	54.2	22.9	2.1	
15+ hours	101	16.8	35.6	28.7	18.8	125	32.8	32.8	28.0	6.4	
Total	425	22.4	36.0	31.8	9.9	579	36.6	40.9	19.3	3.1	

Table F8

Please mark the extent to which you agree or disagree with each of the following statements regarding the professional development activities you participated in during the 2020–2021 school year. The professional development activities I participated in helped me...

		-	ents are lear were prior to	_		-	Hybrid: My students are learning as much or more now as they were prior to the pandemic					
Characteristics	n	Strongly disagree	Disagree	Agree	Strongly agree	n	Strongly disagree	Disagree	Agree	Strongly agree		
adeepen my content knowledge.	30	43.3	30.0	16.7	10.0	42	59.5	26.2	14.3	0.0		
Strongly disagree	58	37.9	39.7	22.4	0.0	102	54.9	34.3	9.8	1.0		
Disagree	222	19.8	40.5	35.6	4.1	314	31.5	47.8	19.4	1.3		
Agree	99	13.1	28.3	31.3	27.3	133	23.3	36.8	31.6	8.3		
Strongly agree	409	22.5	36.7	31.3	9.5	591	35.7	41.5	20.1	2.7		
Total	30	43.3	30.0	16.7	10.0	42	59.5	26.2	14.3	0.0		
bdevelop lesson plans.												
Strongly disagree	20	55.0	20.0	15.0	10.0	30	60.0	23.3	16.7	0.0		
Disagree	65	38.5	46.2	15.4	0.0	82	50.0	41.5	7.3	1.2		
Agree	215	19.1	37.2	38.6	5.1	334	34.7	44.3	19.5	1.5		
Strongly agree	115	13.9	33.0	28.7	24.3	146	26.0	37.7	28.8	7.5		
Total	415	22.4	36.6	31.1	9.9	592	36.0	41.2	19.9	2.9		
cimplement my classroom instruction and lesson plans.												
Strongly disagree	18	55.6	22.2	11.1	11.1	22	50.0	27.3	22.7	0.0		
Disagree	49	49.0	32.7	18.4	0.0	63	52.4	42.9	4.8	0.0		
Agree	230	18.7	39.1	38.3	3.9	367	36.5	43.9	17.7	1.9		
Strongly agree	120	13.3	35.0	27.5	24.2	147	24.5	36.7	32.0	6.8		
Total	417	22.3	36.5	31.7	9.6	599	35.7	41.4	20.0	2.8		

		•	ents are lear were prior to	_		-	•	nts are learni were prior to	-	
Characteristics	n	Strongly disagree	Disagree	Agree	Strongly agree	n	Strongly disagree	Disagree	Agree	Strongly agree
dbetter maintain student engagement.										
Strongly disagree	23	47.8	26.1	17.4	8.7	29	65.5	17.2	17.2	0.0
Disagree	62	43.5	38.7	17.7	0.0	88	54.5	38.6	6.8	0.0
Agree	220	20.0	36.8	38.2	5.0	349	33.2	46.4	18.9	1.4
Strongly agree	112	11.6	35.7	27.7	25.0	132	24.2	35.6	31.8	8.3
Total	417	22.8	36.2	31.2	9.8	598	36.0	41.5	19.9	2.7
ebetter motivate my students to learn during the pandemic.										
Strongly disagree	33	51.5	24.2	18.2	6.1	34	58.8	20.6	20.6	0.0
Disagree	88	37.5	39.8	22.7	0.0	136	54.4	40.4	5.1	0.0
Agree	196	18.9	38.3	37.8	5.1	304	31.6	46.7	20.4	1.3
Strongly agree	95	7.4	32.6	31.6	28.4	124	20.2	35.5	34.7	9.7
Total	412	22.8	36.2	31.6	9.5	598	36.0	41.5	19.9	2.7
fbetter prepare my students for state/standardized tests this year.										
Strongly disagree	38	60.5	23.7	10.5	5.3	83	56.6	26.5	16.9	0.0
Disagree	72	37.5	47.2	15.3	0.0	193	45.1	43.0	11.4	0.5
Agree	205	17.1	36.1	41.5	5.4	203	22.7	47.3	27.1	3.0
Strongly agree	87	5.7	33.3	29.9	31.0	57	17.5	33.3	33.3	15.8
Total	402	22.4	36.3	31.3	10.0	536	35.4	41.0	20.5	3.0

		-	ents are lear were prior to	_		_	•	nts are learni were prior to	_	
Characteristics	n	Strongly disagree	Disagree	Agree	Strongly agree	n	Strongly disagree	Disagree	Agree	Strongly agree
gbetter communicate with parents from diverse linguistic, racial, and ethnic backgrounds.										
Strongly disagree	38	52.6	31.6	10.5	5.3	43	60.5	23.3	16.3	0.0
Disagree	106	35.8	42.5	20.8	0.9	154	44.8	41.6	13.6	0.0
Agree	181	14.9	34.3	45.9	5.0	279	31.9	45.5	20.8	1.8
Strongly agree	81	8.6	30.9	27.2	33.3	96	18.8	38.5	31.3	11.5
Total	406	22.7	35.5	32.3	9.6	572	35.3	41.6	20.3	2.8
hintervene more effectively when students are having trouble learning concepts or skills.										
Strongly disagree	24	66.7	20.8	8.3	4.2	36	66.7	16.7	16.7	0.0
Disagree	74	40.5	40.5	18.9	0.0	144	51.4	38.9	9.7	0.0
Agree	225	20.0	38.2	37.3	4.4	315	30.8	46.3	21.3	1.6
Strongly agree	96	4.2	32.3	33.3	30.2	93	17.2	37.6	33.3	11.8
Total	419	22.7	36.3	31.5	9.5	588	35.9	41.3	20.1	2.7
itake COVID-related safety measures to keep myself and my students healthy.										
Strongly disagree	34	55.9	23.5	14.7	5.9	28	57.1	21.4	21.4	0.0
Disagree	49	40.8	40.8	18.4	0.0	64	43.8	45.3	9.4	1.6
Agree	198	18.2	41.4	35.9	4.5	304	31.9	47.7	18.8	1.6
Strongly agree	123	11.4	27.6	37.4	23.6	181	37.0	34.3	22.7	6.1
Total	404	22.0	35.6	32.4	9.9	577	36.0	41.9	19.1	2.9

		•	ents are lear were prior to	_		-	•	nts are learni were prior to	•	
Characteristics	n	Strongly disagree	Disagree	Agree	Strongly agree	n	Strongly disagree	Disagree	Agree	Strongly agree
juse data to improve my teaching practice.										
Strongly disagree	26	65.4	11.5	15.4	7.7	30	56.7	23.3	20.0	0.0
Disagree	57	38.6	42.1	17.5	1.8	125	45.6	47.2	7.2	0.0
Agree	213	19.7	39.4	37.1	3.8	321	32.4	44.2	21.5	1.9
Strongly agree	116	10.3	32.8	32.8	24.1	109	26.6	33.9	29.4	10.1
Total	412	22.6	36.2	31.8	9.5	585	35.4	41.9	19.8	2.9
kuse technology to improve my instruction.										
Strongly disagree	15	60.0	13.3	20.0	6.7	9	33.3	22.2	44.4	0.0
Disagree	31	41.9	35.5	22.6	0.0	32	59.4	28.1	12.5	0.0
Agree	208	25.0	36.1	34.6	4.3	316	34.2	47.2	16.8	1.9
Strongly agree	155	11.6	37.4	32.3	18.7	224	35.3	38.4	21.9	4.5
Total	409	22.5	35.7	32.3	9.5	581	36.0	42.3	18.9	2.8
lwork with students from diverse racial and ethnic backgrounds.										
Strongly disagree	16	56.3	18.8	12.5	12.5	28	57.1	21.4	21.4	0.0
Disagree	46	41.3	34.8	21.7	2.2	93	51.6	41.9	6.5	0.0
Agree	207	20.8	37.7	38.2	3.4	301	32.6	44.5	20.9	2.0
Strongly agree	131	13.7	35.9	29.8	20.6	151	29.1	37.1	27.2	6.6
Total	400	22.3	36.0	32.5	9.3	573	36.0	41.0	20.2	2.8

		•	ents are lear were prior to	•		Hybrid : My students are learning as much or more now as they were prior to the pandemic					
Characteristics	n	Strongly disagree	Disagree	Agree	Strongly agree	n	Strongly disagree	Disagree	Agree	Strongly agree	
mwork with students with diverse prior skill levels.											
Strongly disagree	26	65.4	15.4	15.4	3.8	36	63.9	19.4	16.7	0.0	
Disagree	48	41.7	39.6	16.7	2.1	113	46.0	46.0	7.1	0.9	
Agree	205	21.0	37.6	37.6	3.9	305	32.8	45.9	20.3	1.0	
Strongly agree	122	9.0	35.2	33.6	22.1	132	26.5	33.3	31.1	9.1	
Total	401	22.7	35.7	32.4	9.2	586	35.8	41.5	20.0	2.7	

Table F9

Please mark the extent to which you agree or disagree with the following statements.

			ents are lear were prior to	_		_	-	nts are learni were prior to	_	
Characteristics	n	Strongly disagree	Disagree	Agree	Strongly agree	n	Strongly disagree	Disagree	Agree	Strongly agree
a. Analyzing student assessments or data with other teachers at my school										
Never	43	48.8	37.2	11.6	2.3	111	45.9	41.4	12.6	0.0
Monthly to quarterly	143	25.2	40.6	30.1	4.2	259	34.7	45.6	17.4	2.3
A few times per month	101	15.8	38.6	39.6	5.9	157	33.8	35.0	26.1	5.1
Weekly	138	15.9	29.0	34.1	21.0	89	31.5	40.4	23.6	4.5
Total	425	22.4	36.0	31.8	9.9	616	36.0	41.4	19.6	2.9
b. Developing or adapting lesson plans or units with other teachers at my school										
Never	55	43.6	38.2	16.4	1.8	93	45.2	35.5	18.3	1.1
Monthly to quarterly	84	22.6	38.1	33.3	6.0	185	35.1	44.9	17.8	2.2
A few times per month	91	18.7	42.9	31.9	6.6	130	25.4	48.5	21.5	4.6
Weekly	195	17.9	31.3	35.4	15.4	208	39.4	36.5	20.7	3.4
Total	425	22.4	36.0	31.8	9.9	616	36.0	41.4	19.6	2.9

		-	ents are lear were prior to	_		=		nts are learni were prior to	_	
Characteristics	n	Strongly disagree	Disagree	Agree	Strongly agree	n	Strongly disagree	Disagree	Agree	Strongly agree
c. Discussing ideas about how to improve student engagement during online lessons.										
Never	15	26.7	40.0	26.7	6.7	35	42.9	42.9	14.3	0.0
Monthly to quarterly	92	25.0	43.5	28.3	3.3	161	36.6	42.9	19.3	1.2
A few times per month	108	27.8	36.1	34.3	1.9	175	32.0	45.1	20.0	2.9
Weekly	210	18.1	32.4	32.4	17.1	245	37.6	37.6	20.4	4.5
Total	425	22.4	36.0	31.8	9.9	616	36.0	41.4	19.6	2.9
d. Discussing students' social emotional needs with other teachers or staff										
Never	23	52.2	17.4	21.7	8.7	20	40.0	40.0	20.0	0.0
Monthly to quarterly	90	17.8	48.9	27.8	5.6	124	37.1	45.2	16.9	0.8
A few times per month	131	24.4	40.5	34.4	0.8	171	34.5	43.3	18.1	4.1
Weekly	181	19.3	28.7	33.1	18.8	300	36.3	38.7	21.7	3.3
Total	425	22.4	36.0	31.8	9.9	615	36.1	41.3	19.7	2.9

		•	ents are lear were prior to	-		-	•	nts are learni were prior to	_	
Characteristics	n	Strongly disagree	Disagree	Agree	Strongly agree	n	Strongly disagree	Disagree	Agree	Strongly agree
e. [Online] platforms and tools for peer collaboration (e.g., online forums, discussion boards, professional communities)										
Never	64	42.2	31.3	23.4	3.1	77	42.9	42.9	13.0	1.3
Monthly to quarterly	120	20.8	41.7	35.0	2.5	212	37.7	44.8	16.0	1.4
A few times per month	116	23.3	38.8	31.9	6.0	179	30.2	44.1	22.3	3.4
Weekly	125	12.8	30.4	32.8	24.0	148	37.2	32.4	25.0	5.4
Total	425	22.4	36.0	31.8	9.9	616	36.0	41.4	19.6	2.9
f. Regular meetings with other teachers and staff at my school and/or district										
Never	7	42.9	14.3	28.6	14.3	13	38.5	30.8	30.8	0.0
Monthly to quarterly	65	20.0	43.1	33.8	3.1	105	39.0	44.8	14.3	1.9
A few times per month	96	22.9	39.6	33.3	4.2	163	28.2	42.9	24.5	4.3
Weekly	257	22.2	33.5	30.7	13.6	335	38.8	40.0	18.5	2.7
Total	425	22.4	36.0	31.8	9.9	616	36.0	41.4	19.6	2.9

		son: My stud now as they		_		Hybrid: My students are learning as much or more now as they were prior to the pandemic					
Characteristics	n	Strongly disagree	Disagree	Agree	Strongly agree	n	Strongly disagree	Disagree	Agree	Strongly agree	
g. Tools that help teachers develop instructional plans together (e.g., digital lesson planners, compiled resources, and guides offered by organizations)											
Never	46	45.7	37.0	15.2	2.2	86	44.2	43.0	10.5	2.3	
Monthly to quarterly	119	26.9	40.3	29.4	3.4	202	37.6	46.0	14.4	2.0	
A few times per month	119	16.8	40.3	37.0	5.9	166	29.5	42.2	25.3	3.0	
Weekly	141	15.6	28.4	34.8	21.3	162	36.4	34.0	25.3	4.3	
Total	425	22.4	36.0	31.8	9.9	616	36.0	41.4	19.6	2.9	

Table F10

Please mark the extent to which you agree or disagree with the following statements.

		•	ents are lear were prior to	_		-	•	nts are learni were prior to	_	
Characteristics	n	Strongly disagree	Disagree	Agree	Strongly agree	n	Strongly disagree	Disagree	Agree	Strongly agree
a. I am giving students who need the most academic support the support they need during [the pandemic/online learning].										
Strongly disagree	18	83.3	5.6	5.6	5.6	37	78.4	16.2	5.4	0.0
Disagree	59	47.5	45.8	6.8	0.0	198	41.9	50.0	8.1	0.0
Agree	253	15.4	37.5	45.1	2.0	293	29.0	42.3	27.3	1.4
Strongly agree	95	13.7	31.6	16.8	37.9	87	28.7	28.7	26.4	16.1
Total	425	22.4	36.0	31.8	9.9	615	36.1	41.3	19.7	2.9
b. I am motivating my students during the pandemic.										
Strongly disagree	8	100.0	0.0	0.0	0.0	11	81.8	9.1	9.1	0.0
Disagree	40	42.5	52.5	2.5	2.5	79	65.8	30.4	3.8	0.0
Agree	265	20.8	37.4	41.1	0.8	392	33.2	47.2	19.4	0.3
Strongly agree	112	13.4	29.5	22.3	34.8	134	23.1	33.6	30.6	12.7
Total	425	22.4	36.0	31.8	9.9	616	36.0	41.4	19.6	2.9

		•	ents are lear were prior to	-		-	•	nts are learni were prior to	•	
Characteristics	n	Strongly disagree	Disagree	Agree	Strongly agree	n	Strongly disagree	Disagree	Agree	Strongly agree
c. I can provide effective instruction during [the pandemic/online learning].										
Strongly disagree	16	87.5	0.0	12.5	0.0	28	85.7	7.1	7.1	0.0
Disagree	58	44.8	44.8	8.6	1.7	140	61.4	35.7	2.9	0.0
Agree	252	18.3	40.5	40.1	1.2	332	27.1	48.5	23.2	1.2
Strongly agree	99	9.1	25.3	27.3	38.4	115	18.3	36.5	33.0	12.2
Total	425	22.4	36.0	31.8	9.9	615	35.9	41.5	19.7	2.9
d. I have had sufficient training and/or experience [to integrate technology for effective teaching/ using technology (video calls, learning management system, etc.) to deliver effective online teaching].										
Strongly disagree	24	79.2	16.7	4.2	0.0	24	62.5	20.8	16.7	0.0
Disagree	59	40.7	39.0	20.3	0.0	125	52.8	43.2	4.0	0.0
Agree	246	17.1	39.0	41.1	2.8	350	32.9	44.9	21.4	0.9
Strongly agree	96	10.4	31.3	21.9	36.5	117	22.2	33.3	31.6	12.8
Total	425	22.4	36.0	31.8	9.9	616	36.0	41.4	19.6	2.9

		•	ents are lear were prior to	_		_	•	nts are learni were prior to	_	
Characteristics	n	Strongly disagree	Disagree	Agree	Strongly agree	n	Strongly disagree	Disagree	Agree	Strongly agree
e. My students are engaged in class during the pandemic. / My students are as engaged in classes as they were during in-person classes.										
Strongly disagree	27	85.2	11.1	0.0	3.7	204	78.4	18.6	2.9	0.0
Disagree	99	40.4	46.5	11.1	2.0	246	21.1	67.9	10.2	0.8
Agree	237	12.7	40.9	46.0	0.4	137	5.1	35.0	57.7	2.2
Strongly agree	62	3.2	11.3	24.2	61.3	29	10.3	6.9	37.9	44.8
Total	425	22.4	36.0	31.8	9.9	616	36.0	41.4	19.6	2.9
f. My students are coping well with [learning during the pandemic/online learning].										
Strongly disagree	34	88.2	11.8	0.0	0.0	100	85.0	10.0	5.0	0.0
Disagree	137	33.6	55.5	10.2	0.7	257	41.6	52.1	6.2	0.0
Agree	203	8.9	35.0	54.7	1.5	229	12.7	46.7	38.4	2.2
Strongly agree	51	2.0	3.9	19.6	74.5	29	3.4	10.3	41.4	44.8
Total	425	22.4	36.0	31.8	9.9	615	36.1	41.3	19.7	2.9

Table F11

Please mark how often you did each of the following activities.

		-	ents are lear were prior to	_		-	•	nts are learni were prior to	•	
Characteristics	n	Strongly disagree	Disagree	Agree	Strongly agree	n	Strongly disagree	Disagree	Agree	Strongly agree
a. I assess student progress toward learning goals.										
Never	1	100.0	0.0	0.0	0.0	3	33.3	66.7	0.0	0.0
Semesterly	4	0.0	100.0	0.0	0.0	28	39.3	50.0	10.7	0.0
Monthly	55	30.9	30.9	38.2	0.0	104	42.3	41.3	14.4	1.9
Weekly	211	23.7	37.0	33.2	6.2	311	35.0	41.8	20.6	2.6
Daily	154	17.5	35.1	28.6	18.8	169	33.7	38.5	23.1	4.7
Total	425	22.4	36.0	31.8	9.9	615	36.1	41.3	19.7	2.9
b. I use assessment results to adapt instruction to meet student needs.										
Never	3	66.7	33.3	0.0	0.0	7	57.1	42.9	0.0	0.0
Semesterly	9	22.2	55.6	22.2	0.0	25	52.0	40.0	8.0	0.0
Monthly	60	25.0	33.3	41.7	0.0	117	41.9	42.7	12.8	2.6
Weekly	240	21.3	39.2	32.1	7.5	307	34.5	43.3	19.5	2.6
Daily	113	22.1	29.2	27.4	21.2	159	31.4	36.5	27.7	4.4
Total	425	22.4	36.0	31.8	9.9	615	36.1	41.3	19.7	2.9

		•	ents are lear were prior to	_		Hybrid : My students are learning as much or more now as they were prior to the pandemic					
Characteristics	n	Strongly disagree	Disagree	Agree	Strongly agree	n	Strongly disagree	Disagree	Agree	Strongly agree	
c. I re-teach topics because student performance on assignments or assessments did not meet high standards.											
Never	5	40.0	40.0	20.0	0.0	22	40.9	36.4	18.2	4.5	
Semesterly	18	22.2	44.4	33.3	0.0	29	37.9	37.9	24.1	0.0	
Monthly	92	20.7	43.5	32.6	3.3	115	39.1	45.2	11.3	4.3	
Weekly	215	23.7	36.7	31.2	8.4	302	37.1	43.0	16.9	3.0	
Daily	95	20.0	25.3	32.6	22.1	147	30.6	36.1	31.3	2.0	
Total	425	22.4	36.0	31.8	9.9	615	36.1	41.3	19.7	2.9	

Table F12

Please mark the extent to which you agree or disagree with the following statements.

		-	ents are lear were prior to	_		_		nts are learni were prior to	_	
Characteristics	n	Strongly disagree	Disagree	Agree	Strongly agree	n	Strongly disagree	Disagree	Agree	Strongly agree
a. Students in my classes during the 2020–2021 school year represented a heterogeneous ability mix.										
Strongly disagree	11	45.5	36.4	18.2	0.0	16	56.3	12.5	31.3	0.0
Disagree	24	16.7	50.0	29.2	4.2	46	41.3	39.1	19.6	0.0
Agree	246	23.2	36.6	36.2	4.1	348	37.4	42.0	19.0	1.7
Strongly agree	144	20.1	32.6	25.7	21.5	204	30.9	43.1	20.1	5.9
Total	425	22.4	36.0	31.8	9.9	614	36.0	41.4	19.7	2.9
b. Students in my classes during the 2020–2021 school year represented the racial diversity of the school.										
Strongly disagree	4	50.0	25.0	0.0	25.0	9	66.7	11.1	22.2	0.0
Disagree	11	36.4	18.2	36.4	9.1	36	41.7	47.2	8.3	2.8
Agree	233	22.7	38.2	36.5	2.6	359	37.0	42.1	19.2	1.7
Strongly agree	177	20.3	34.5	26.0	19.2	209	31.6	40.7	22.5	5.3
Total	425	22.4	36.0	31.8	9.9	613	35.9	41.4	19.7	2.9

Table F13
For the students you taught this year, how many of their parents:

		•	ents are lear were prior to	•		-	•	nts are learni were prior to	•	
Characteristics	n	Strongly disagree	Disagree	Agree	Strongly agree	n	Strongly disagree	Disagree	Agree	Strongly agree
a. Attended parent teacher conferences?										
Few (0-20%)	226	26.5	35.4	30.5	7.5	237	44.3	40.9	13.5	1.3
Some (21-40%)	97	17.5	38.1	36.1	8.2	119	37.0	38.7	22.7	1.7
About half (41-60%)	43	18.6	39.5	27.9	14.0	75	29.3	45.3	21.3	4.0
Most (61-80%)	33	15.2	30.3	30.3	24.2	93	33.3	39.8	22.6	4.3
Nearly all (81-100%)	26	19.2	34.6	34.6	11.5	87	21.8	43.7	27.6	6.9
Total	425	22.4	36.0	31.8	9.9	611	36.2	41.2	19.6	2.9
b. Initiated communication (e.g., email, phone, Skype) to check on their child's progress?										
Few (0-20%)	200	27.5	40.5	28.0	4.0	201	42.3	40.3	16.9	0.5
Some (21-40%)	135	23.0	38.5	30.4	8.1	213	39.0	42.7	15.0	3.3
About half (41-60%)	37	10.8	27.0	40.5	21.6	83	34.9	38.6	26.5	0.0
Most (61-80%)	34	5.9	17.6	47.1	29.4	70	21.4	48.6	20.0	10.0
Nearly all (81-100%)	19	15.8	21.1	36.8	26.3	44	20.5	31.8	40.9	6.8
Total	425	22.4	36.0	31.8	9.9	611	35.8	41.5	19.7	2.9

		-	ents are lear were prior to	_		-	Hybrid : My students are learning as much or now as they were prior to the pandemic					
Characteristics	n	Strongly disagree	Disagree	Agree	Strongly agree	n	Strongly disagree	Disagree	Agree	Strongly agree		
c. Responded to my messages (emails, calls, texts) within one or two days?												
Few (0-20%)	121	28.9	35.5	30.6	5.0	94	52.1	30.9	17.0	0.0		
Some (21-40%)	128	20.3	43.8	29.7	6.3	142	35.2	43.7	19.0	2.1		
About half (41-60%)	52	19.2	26.9	42.3	11.5	12	44.6	42.9	12.5	0.0		
Most (61-80%)	73	16.4	35.6	32.9	15.1	151	27.2	45.0	22.5	5.3		
Nearly all (81-100%)	51	23.5	27.5	27.5	21.6	112	27.7	40.2	25.9	6.3		
Total	425	22.4	36.0	31.8	9.9	611	35.9	41.5	19.7	2.9		
d. Attended [online] school events?												
Few (0-20%)	272	26.1	39.7	28.3	5.9	261	46.4	38.3	15.3	0.0		
Some (21-40%)	86	18.6	30.2	40.7	10.5	199	33.7	44.2	19.1	3.0		
About half (41-60%)	34	11.8	26.5	38.2	23.5	84	32.1	39.3	23.8	4.8		
Most (61-80%)	20	5.0	35.0	35.0	25.0	46	6.5	47.8	32.6	13.0		
Nearly all (81-100%)	13	23.1	23.1	23.1	30.8	21	14.3	42.9	33.3	9.5		
Total	425	22.4	36.0	31.8	9.9	611	36.2	41.2	19.6	2.9		

Appendix G: Reliability Analyses

Table G1
Reliability for the 2021 Teacher Surveys

			In Perso	n				Hybrid/Online			
Teacher survey constructs	n	# items	Item means	Item variance	Alpha	n	# items	Item means	Item variance	Alpha	
Teaching Activities and Experiences											
Schooltime Activities	444	12	26.64	11.40	.67	621	16	38.46	22.36	.76	
Barriers to Teaching and Learning	442	18	18.52	23.81	.90	629	10	21.74	25.28	.87	
Simultaneous Teaching	428	11	32.70	35.82	.87	na	na	na	na	na	
Teacher PD and Collaboration											
PD Type: Formal and Coaching	436	3	9.27	8.55	.60	627	3	9.36	9.05	.66	
PD Type: Collaboration	436	3	10.86	13.22	.86	629	3	10.32	11.96	.85	
PD Activities	429	14	44.04	216.97	.95	582	14	42.50	191.88	.94	
PD Impact	359	13	38.97	77.11	.96	483	14	41.06	69.57	.94	
Collaborative Activities	425	7	21.07	28.40	.90	619	7	19.96	26.15	.88	
Student Support											
Instructional Model	425	7	19.84	17.10	.88	614	7	17.72	15.34	.85	
Standards-based Instruction	425	3	12.16	3.74	.79	615	3	11.80	4.59	.75	
Student Integration and Parent Support											
Student Integration	425	2	6.60	1.29	.78	613	2	6.46	1.34	.71	
Parent Involvement	425	4	7.99	14.72	.82	611	4	9.76	17.48	.82	

Table G2
Reliability for the 2021 Student Surveys

			In Person			Hybrid/Online					
Student survey constructs	n	# items	Item means	Item variance	Alpha	n	# items	Item means	Item variance	Alpha	
Learning Engagement Experiences											
Class-Time Activities	944	13	27.15	15.51	.72	1342	17	38.52	39.49	.80	
Afterschool and Weekend Activities	936	4	6.35	2.69	.58	1529	4	6.17	2.55	.58	
Barriers	930	9	19.16	18.36	.82	1506	9	18.78	20.12	.84	
Learning Efficacy	na	na	na	na	na	1484	12	32.42	22.94	.61	
Intergroup Relationships	911	12	38.63	45.90	.89	1450	12	40.48	39.28	.91	
Academic Commitment and Expectation	907	8	22.56	24.26	.86	1443	8	23.10	21.83	.87	



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