Survey Results for State of Michigan Teachers and Parents

K-12 Teacher and K-12 Parent Experiences with Remote Learning During COVID

We are all new teachers now...

“As a teacher, I feel like a student teacher: everything is new, I don't have anything prepared that I can reuse, and I don't have the same instincts that I'm used to as a teacher. As a teacher leader, I'm frustrated that some of my colleagues aren't getting much direction from administrators so they freeze, shut down, or ask me to solve everything for them. I absolutely understand where they're coming from and I want to be helpful and supportive. But sometimes I just don't have the bandwidth or the authority to tell them what to do. And that's what they want: clear direction.”

High School Teacher in Rural School in Michigan
Study Purpose

to gather more information on K-12 teacher and parent perceptions student participation and teacher experiences during 2020 COVID remote learning. This report focuses on Michigan responses.

Link to K-12 Teacher Results
  1:1 School Comparison
  Title 1 School Comparison
  Grade Level Comparison
  Qualitative Results for Teacher Survey

Link to K-12 Parent Results
  Cross-Tab Noticing
  Qualitative Results for Parent Survey

Discussion and Trends
Michigan K-12 Teacher Survey Data During COVID Remote Learning

K-12 Teacher Survey

- Survey disseminated via social media, K-12 list serves and K-12 email groups.
- Open between March 28th and May 30th
- 30 Quantitative and 8 Qualitative questions
- Data Cleaned
- Qualitative Data thematically coded
- **1258 Completed Clean Surveys from the State of Michigan**
What type of school district do you teach in?

- Traditional Public School: 81.37%
- Private School: 10.35%
- Other: 8.28%

1258 K-12 Michigan Teachers
Is the demographic area of your school system considered?

- Suburban (includes college towns that are not in major cities) - 11%
- Rural - 2%
- Urban (large densely populated cities, 150,000 people+) - 56%
- Other - 31%
Does your school building receive Title 1 funding?

- Yes: 46.57%
- No: 46.81%
- Not sure: 6.62%

1258 K-12 Michigan Teachers
How many children are in your school district?

- Over 15,000: 48.76%
- Between 5,000 and 15,000: 31.28%
- Less than 5,000: 9.26%
- Not sure: 10.69%
What grade level do you teach? (check all that apply)

1258 K-12 Michigan Teachers
How long after school closing for COVID were you asked to teach remotely?

- Less than a week: 35.44%
- 1 week: 11.56%
- 2 weeks: 12.31%
- 3 or 4 weeks: 35.27%
- 5 or more weeks: 5.41%

1258 K-12 Michigan Teachers
Over half of teachers were asked to do new instruction, but a lighter load during COVID remote learning.
Overall ___ % of my students have fully participated in their remote learning activities.

- 100% have fully participated: 6.59%
- 80% have fully participated: 31.75%
- 50% have fully participated: 26.08%
- 30% have fully participated: 23.60%
- Less than 10% have fully participated: 11.99%

7% of teachers had 100% of their students participate in remote learning during COVID.
Motivation was the number one reason that teachers saw a lack of participation from their students during COVID remote learning.
During remote learning, what type of remote learning approaches did you use?

- The online tools that are not live (asynchronous): 31.31%
- The online tools that are live class sessions (synchronous): 22.70%
- Activities through text messaging or phone calls: 13.35%
- Paper workbooks or packets: 17.61%
- Offline activities such as doing a science experiment or art project at home: 15.04%
During COVID, which remote learning approach garnered the most response/participation from your students?

- The online tools that are not live (asynchronous): 52.87%
- The online tools that are live class sessions or check ins (synchronous): 25.57%
- Paper workbooks or packets: 9.29%
- Offline activities such as doing a science experiment or art project at home: 6.70%
- Activities through text messaging or phone calls: 5.56%

53% of teachers felt the asynchronous tool learning options elicited the most participation from students.
33% of teachers felt well prepared to teach remotely during COVID.
18% of teachers felt their district provided well organized and structured PD to help them teach remotely during COVID.
432 (34%) teachers said their district offered no formal PD during COVID remote learning.
What tools did you use for remote learning during COVID? (check all that apply)

Learning Management Systems, Live Synchronous Class Meetings, and the Google Suite were the most popular tools used during COVID remote learning.
23% of schools provide a device for every K-12 student.
64% of teachers did not regularly use a learning management system for academic learning prior to COVID.
60% of the teachers said their school used different learning management systems at different grades and/or levels in their district.
41% of school districts require teachers to use a certain learning management system.
Did you (or your district) select digital learning applications that were easily accessible during COVID?

- 56.80% selected digital tools that were easily accessible to students during COVID.
- 38.61% selected tools that were accessible to students.
- 4.59% selected tools that were a lot of trouble accessing.
Did you have a voice in which technology tools you got to use this school year?

- Yes, I had full control of the technology tools for my classroom: 34.05%
- Somewhat, the school prescribed some tools that I had to use but I was able to select some on my own: 48.43%
- No, the school prescribed almost all of the tools that I used in my classroom teaching: 17.52%

34% of teachers had a voice in what digital tools their students used during the school year.
On average, how many applications/websites have you asked your students to navigate during remote learning?

- 0: 0.73%
- 1 or 2: 39.89%
- 3, 4 or 5: 52.15%
- 6, 7 or 8: 5.95%
- 9 or more: 1.28%
Do you feel that the number of applications/websites that your students had to navigate were..

- **Just right**: 60.44%
- **Too many**: 18.04%
- **Too few**: 4.40%
- **Not sure**: 17.12%

1258 K-12 Michigan Teachers
From the beginning of the school year, did you set up independent learning routines around classroom technology tools so your students understood how to use them for academic learning on their own during COVID?

36% of teachers set up independent learning routines around classroom technology from the beginning of the school year.
20% of teachers encouraged students to use classroom technology at home prior to COVID.
7% of teachers encouraged students to do school learning routines at home prior to COVID.
Has your communication from school to home been consistent from the beginning of the school year?

41% of teachers had consistent communication (from school to home) prior to COVID.
57% of teachers used some different communication tools during COVID (compared to the rest of the year).
What tools did you use to communicate with students/caregivers during COVID? (check all that apply)

- Email: 970
- LMS messaging: 699
- Phone Calls: 574
- Text message (such as Remind): 495
- U.S. Mail (snail mail): 227
- Social Media: 215
- Other: 92

1258 K-12 Michigan Teachers
24% of school districts have communicated student data privacy laws or copyright laws with teachers.
In your opinion, do you feel that you have been compliant with keeping student data private and secure during remote learning?

- Yes, as far as I can tell: 87.38%
- Somewhat, I have a few questions but overall it seems compliant: 10.48%
- No, not at all: 0.19%
- Not sure: 1.95%
59% of teachers felt remote learning was more work than face to face teaching.
K-12 Student Participation and Teacher Preparation in Remote Learning in 1:1 Schools

- 186 Teachers in a 1:1 School
- 487 Teachers not in a 1:1 School
40% of students who were in 1:1 programs had 80-100% participation in their remote learning.

32% of students who were not in 1:1 programs had 80-100% participation in their remote learning.
Whether in a 1:1 school or not, teachers in general have not been encouraging school learning routines at home.
52% of teachers who were in 1:1 programs were using the exact same communication tools before and during COVID.

39% of teachers who were not in 1:1 programs were using the exact same communication tools before and during COVID.
50% of teachers who were in 1:1 programs selected learning tools that were easily accessible to their students during remote learning.

29% of teachers who were not in 1:1 programs selected learning tools that were easily accessible to their students during remote learning.
44% of teachers who were in 1:1 programs set up routines around classroom technology tools.

31% of teachers who were not in 1:1 programs set up routines around classroom technology tools.
52% of teachers who were in 1:1 programs regularly used a learning management system from the beginning of the school year.

26% of teachers who were not in 1:1 programs regularly used a learning management system from the beginning of the school year.
1:1 schools tended to start remote learning during COVID quicker than schools that were not 1:1
K-12 Student Participation and Teacher Preparation in Remote Learning in Title I Schools

- 491 schools that qualify for Title 1
- 493 Schools that do not qualify for Title 1
Students in Title 1 schools tended to participate less in remote learning than students in schools that were not Title 1.
Title 1 schools tended to start remote learning later than schools that were not Title 1.
Title 1 schools tended to choose tools that were less accessible to their students than schools that were not Title 1.
Teachers in Title 1 schools did not introduce learning management systems for academic learning as often as teachers in schools that were not Title 1.
Students in Title 1 schools struggled more than students in non-Title 1 schools when it came to digital access, know how, time, and with more trauma as reasons for not fully participating in their remote learning during COVID.
Remote Teaching and Learning by Grade Level
Overall, ____% of my students have fully participated in their remote learning activities.
While few grade levels had full participation from many students, the middle grades tended to have the least amount of 100% participation.
Elementary teachers tended to ask students to navigate more sites than high school teachers.
During COVID, which approach has garnered the most response/activity from your students?

- The online tools that are not live (asynchronous)
- The online tools that are live class sessions or check ins (synchronous)
- Activities through text messaging or phone calls
- Paper workbooks or packets
- Offline activities such as doing a science experiment or art project at home
From the beginning of the school year, did you set up routines around classroom technology tools?

- Blue line: Yes, I definitely did this, my students were able to navigate the tools they use for academic learning independently (during COVID)
- Red line: Somewhat, my students did struggle with navigating tools independently (during COVID)
- Green line: No, my students were not able to navigate these tools independently (during COVID)
It was more common for a high school teacher to use a learning management system from the beginning of the school year with their students, than an elementary teacher.
Students who were already or somewhat familiar with digital tools prior to COVID had stronger participation in remote learning during COVID than students who were not familiar with digital tools prior to COVID.
Teachers that began remote teaching earlier, had stronger participation than teachers that waited to start remote teaching.
Teachers who felt prepared to teach remotely had more participation in remote learning than teachers who felt they did not have enough preparation to teach remotely.
72% of students that fully participated in remote learning had no problem accessing the digital learning tools at home during COVID.
From the beginning of the school year, did you set up routines around classroom technology tools so your students understood how to use them for academic learning on their own during COVID?

- **69.2%** said yes, they definitely did this, my students were able to navigate the tools they use for academic learning independently (during COVID).
- **26.9%** said somewhat, my students did struggle with navigating tools independently (during COVID).
- **3.8%** said no, my students were not able to navigate these tools independently (during COVID).
- **0.0%** reported unsure.

**Students' Participation:**

- **100%** have fully participated in all their remote learning activities (with very few exceptions).
- **80%** have fully participated in all of their remote learning activities.
- **50%** have fully participated in all of their remote learning activities.
- **30%** have fully participated in all of their remote learning activities.
- **Less than 10%** have fully participated in all of their remote learning activities.
85% of students participated 80-100% of the time in remote learning when their teachers were using a learning management system from the beginning of the school year for academic learning.
Qualitative Results for K-12 Teacher Survey
K-12 Teachers: Notice that if they had blended tools when they were F2F, students would be/were more independent in using them at home for learning.

“I wish I had shown them how to use more tech tools that would be beneficial during this time of remote learning (e.g., Perusal, Flipgrid, etc.) to give them more ways to interact with the materials I've provided them with.”

“Using Seesaw More at School.”

“I wish my I taught my students independence with video calls and etiquette.”

“I'm glad I have used Canvas consistently during the year so the transition to remote worked fairly well.”
K-12 Teachers: Notice that they need more consistent tools across the district.

“I wish I had used Canvas assignments more with my students, so we all would have already developed a routine.”

“I would continue to encourage grade 9-12 teachers to transition to the Canvas LMS. The remote learning process would be greatly streamlined if students were referencing the same single LMS for all of their subjects each day.”

“I think using a more consistent platform of teaching across the district would be helpful to families with multiple children. Many families are having to navigate too many different styles of online learning and is causing extra stress on families. It's difficult for staff to engage students and families when the families are constantly feeling overwhelmed.”
K-12 Teachers: Notice much PD focused on how to use tools and less on how to use tools with instructional pedagogy and best practices.

“All PD was about using new software and technology for remote learning, but nothing specifically addressed how to adjust teaching and provided actual suggestions for teaching a reading or math lesson with these tools.”

“All of our PD centered around how to use the technology, but there was no pedagogy or best practice for student success.”
K-12 Teachers: Notice that they did not receive much support for their students on IEPs, ELs and mental health

“Remote Learning was primarily directed toward the General Education. Special Education was backfilled…”

“I wish I had been provided with training that was specific to the needs of ELL, autism. Intellectually impaired students with parents who do not know applied Behavioral Analysis and/or have very limited English proficiency or access to computers.”

“I wish I knew how to teach about mental health to students and how to work with trauma informed students online.”

“How to design and modify lessons for individualized plans (IEPs) and how to differentiate learning online.”
K-12 Teachers: In districts where teachers were already blending learning from school to home, teachers felt prepared.

“For me, this was not an issue. I already did blended learning in the classroom. Other teachers are stressed because they were not already blending with Google Classroom.”

“Our district was already in a good spot with using a lot of technology and resources within our classroom, so we were well prepared for online teaching. I would have loved more time to prep, but did not need more PD.”

“We already offered hybrid classes for 6 years, so this transition was not that hard.”
Survey Data: Methodology

**K-12 Parent Survey**

- Survey disseminated via social media, K-12 list serves and K-12 email groups.
- Open between March 26th and May 20th
- 31 Quantitative and 7 Qualitative questions
- Data Cleaned
- Qualitative Data thematically coded
- **1522 Completed Clean Surveys from the State of Michigan**

This section will share a comparison of K-12 Teacher Surveys and K-12 Parent Surveys (small image of graph is the K-12 Teacher Survey Results)
What type of school district does your child attend?

- **Traditional Public**: 81.99%
- **Private**: 15.38%
- **Charter (non profit)**: 1.78%
- **Charter (for profit)**: 0.53%
- **Virtual School**: 0.13%
- **Other**: 0.20%
Is your school system considered...

- **Suburban (this would also include college towns that are not in major cities)**: 82.98%
- **Rural**: 8.64%
- **Urban (very large densely populated cities, 150,000 people+)**: 6.79%
- **Other**: 1.58%
Does your child's school building receive Title 1 funding?

- Yes: 17.74%
- No: 59.56%
- Not sure: 22.69%
How many children are in your child's school district?

- Over 15,000: 35.82%
- Between 5,000 and 15,000: 18.67%
- Less than 5,000: 20.91%
- Not sure: 24.60%

1522 K-12 Parents in Michigan
What grade level is your child?

- Pre-K: 1.36%
- K: 9.32%
- 1: 10.97%
- 2: 9.75%
- 3: 10.18%
- 4: 8.89%
- 5: 8.60%
- 6: 6.67%
- 7: 6.67%
- 8: 7.53%
- 9: 5.88%
- 10: 5.45%
- 11: 5.02%
- 12: 3.73%

1522 K-12 Parents in Michigan
Less than half of students were using an LMS for regular academic learning in school prior to COVID.
Over half of schools have different LMS systems at different grade levels or subject areas.
Parents and teachers differed on whether the tools were accessible at home. 69% of parents found them accessible, while only 39% of parents felt they were accessible for students at home.
In general less than ⅓ of students were asked to use classroom technology at home for learning prior to COVID.
LMS, Live synchronous rooms, and the Google suite were the most used digital learning tools during COVID remote learning.
There was a large discrepancy in how much remote learning student participation teachers saw versus parents.
Both parents and teachers cited motivation as the number one issue keeping children from participating in remote learning during COVID.
Both teachers and parents found the online asynchronous tools to be the preferred learning application during COVID remote learning.
On average how many applications/websites does your middle or high School child have to navigate in their remote learning during COVID each week? This includes your child's LMS.

- 8.66%: 0
- 16.59%: 1 or 2
- 51.23%: 3 to 5
- 18.18%: 6 to 8
- 5.34%: 9 or more

K-12 Teacher Survey

1522 K-12 Parents in Michigan
On average how many applications/websites does your Elementary child have to navigate in their remote learning during COVID each week? This includes your child's LMS.

- 0 applications/websites: 2.33%
- 1 or 2 applications/websites: 22.56%
- 3 to 5 applications/websites: 54.42%
- 6 to 8 applications/websites: 17.56%
- 9 or more applications/websites: 3.14%

1522 K-12 Parents in Michigan
More parents than teachers felt that the number of websites for their children to navigate were too many.
Overall, communication from my child's school has been...

- 55.82%: Very consistent, we get a message on the same day each week, it is clear and easy to follow
- 35.15%: Somewhat consistent, we get a message each week, that is somewhat clear
- 9.03%: Not consistent, messaging is random and unclear

1522 K-12 Parents in Michigan
The communication tools that our district uses are...(check all that apply)

- Email: 1239
- Social Media: 662
- Phone Calls: 583
- Static Website: 511
- Text Message: 373
- Other: 69

1522 K-12 Parents in Michigan
The communication tool that my district uses that is most accessible for me is...(check all that apply)

- Email: 1188
- Text Message: 366
- Social Media: 318
- Phone Calls: 312
- Static Website: 177
- Other: 22

1522 K-12 Parents in Michigan
Around 40% of both teachers and parents agreed that communication was consistent all school year.
Is your child's teacher using the same communication tools during COVID that they were using when your child was in their classroom?

Less than half of parents and teachers found the communication tools during COVID consistent with the communication tools used prior to COVID.

K-12 Teacher Survey

- Yes, exact same tools: 43.73%
- Somewhat, some same, some different: 44.57%
- No, I used different tools: 11.70%
About half of the K-12 teachers set up routines around using classroom technology so that students were independent users of technology.
What tools does your child's teacher use to communicate with you now, during COVID? (check all that apply)

- Email: 1089
- LMS messaging: 648
- Text message: 205
- Phone Calls: 104
- Social Media: 101
- Other: 56
- U.S. Mail (snail mail): 43

1522 K-12 Parents in Michigan
Has your child's teacher tried to continue the same classroom routines or strategies at home during COVID that they used when they were face to face (such as modeling lessons, small discussion groups, circle time...etc.)?

11% of teachers consistently continued to use school learning routine at home during COVID.
Prior to COVID, had your child's teacher encouraged doing school routines at home (such as interactive modeling at home, morning meetings at home, think/pair/share at home...etc)?

K-12 Teacher Survey

- Yes, I fully integrated these classroom strategies and routines into homework assignments: 7.06%
- Somewhat, occasionally I would integrate these classroom strategies and routines into homework assignments: 25.74%
- No, classroom routines at home were not explicitly encouraged prior to COVID: 67.19%

- Yes, the teacher integrated these classroom strategies and routines into homework assignments: 9.31%
- Somewhat, occasionally the teacher would integrate classroom strategies and not explicitly encouraged the teacher prior to COVID: 23.27%
- No, classroom routines at home were not explicitly encouraged by the teacher prior to COVID: 67.43%

less than 9% of teachers regularly encouraged students to use school learning routine at home.
32% of caregivers felt that they were doing the work of a full time teacher at home.
Has your district shared legal policy related to COPPA, FERPA, image posting policies, and copyright related to remote learning during COVID with you?

K-12 Teacher Survey

1522 K-12 Parents in Michigan
In your opinion, do you feel your child's teacher has been compliant with keeping student data private and secure during remote learning?

- Yes, as far as I can tell: 75.83%
- Somewhat, I have a few questions but overall it seems compliant: 8.76%
- No, not at all: 1.62%
- Not sure: 13.79%
Cross-Tab Noticing from K-12 Parent Survey
51% of students who had regularly used a learning management system from day 1 of the school year fully participated in their remote learning activities.

21% of students who had not used a learning management system prior to COVID fully participated in remote learning activities.
79% of students who found digital tools easily accessible during remote learning fully participated in their remote learning activities.

0.5% of students who had lots of trouble accessing digital tools during remote learning fully participated in remote learning activities.
90% of students whose teacher used the same communication tools during COVID that they were using prior to COVID, fully or partially participated in remote learning activities.

9% of students whose teachers used different communication tools during COVID fully participated in remote learning activities.
63% of students whose teacher tried or somewhat tried to continue the same classroom routines/strategies during COVID that they were using prior to COVID, fully participated in remote learning activities.

34% of students whose teacher did not continue the same classroom routines/strategies during COVID that they were using prior to COVID, fully participated in remote learning activities.
As a parent/caregiver how much of the "teaching" burden are you taking up?

- 27.3% Fully participated in all their remote learning (80-100%)
- 38.1% Somewhat participated in their remote learning (50%)
- 40.0% Not participated at all in their remote learning (0-30%)

- 29.4% I feel as though I am doing more than I have in the past, but am still able to do other work/activities throughout the day, while still helping my child
- 27.6% I have not done much to intervene in my child's learning, they are fairly independent.
- 15.8% I have not done much to intervene, my child is not independent, but I am unable to do much because of my own job or stress or other life activities.
- 5.0% 10.0% 1.9%
Qualitative Results for K-12 Parent Survey
Most Common Themes in Qualitative Results: What skills did your child lack that prevented them from fully participating in remote learning? (from most to least common)

1. My child lacks ability to navigate programs and apps online independently.
2. My child lacks basic keyboarding skills.
3. My child lacks basic computer literacy skills (e.g. copy/paste, spell check, basic computer skills, internet navigation, mouse skills).
4. My child lacks the necessary executive functioning for organization, time management, accountability, management between screens.
5. My child was not motivated to do the online work.
6. My child did not struggle because they already used the tools at school.
7. Schools did not address my child’s stress.
8. Some teachers were better than others at using the tools and communication (felt inequitable).
9. My child was too young to navigate the tools independently.
10. My child lacked digital citizenship skills.
11. My child did not know how to discourse with other students online.
12. Too much screen time expected from schools, felt unhealthy.
13. Wish our school had 1:1 device access.
14. I wish the school provided a list of school approved applications.
Most Common Themes in Qualitative Results: What would you like your child's district or teacher to know about your experiences with remote learning? (from most to least common)

1. Not developmentally appropriate for my child to do the work independently.
2. The district/teacher did the best they could under the circumstances.
4. My Child’s experience varied depending on teacher and/or subject matter.
5. Communication was unclear and inconsistent from district/teacher.
6. Teachers needed to better address “how to use” digital tools and manage them in the live synchronous sessions.
7. Very difficult for parents who were managing multiple kids and multiple teachers/classes.
8. Too many tools and platforms for my child to navigate.
9. Assignments are more time consuming online than in person.
10. Hard to motivate my child to participate.
11. Teachers need to consider the amount of parent support needed for children to fully participate.
12. Teachers are not teaching very much (wonderings about what teacher were doing).
13. Parents had concerns about student data privacy and Internet safety.
14. Too much printing and uploading to sites.
15. The synchronous sessions helped my child feel less isolated.
16. Children are stressed.
17. Children needed more social interactions with peers.
18. Need more consistent communication, that is shorter and to the point.
Most Common Themes in Qualitative Results: **What were the overall challenges to remote Learning?** (from most to least common)

1. Difficult for working parents to navigate (especially if there were synchronous required class times).
2. Child could not independently use the tools.
3. Child had never used the tools before remote learning.
4. Communication from district kept changing.
5. Too much information from district/teacher for child/caregiver to navigate.
Discussion
Trends

Prior to COVID

▪ Most K-12 teachers were not using Learning Management Systems for academic learning activities.
▪ Most K-12 teachers were not encouraging classroom teaching strategies, routines or tools to be used at home.
▪ Most K-12 teachers were inconsistent with school to home communications.
▪ Most K-12 school districts were not sharing data privacy information with caregivers or teachers.
▪ Most K-12 schools were not fully 1:1 (K-12).
Trends

During COVID

▪ When K-12 teachers selected digital tools that were easily accessible to their students, they had better participation in remote learning activities.
▪ When K-12 teachers used the same/consistent communication tools that they were using prior to COVID, they had better participation in remote learning activities.
▪ When K-12 teachers used an LMS from the beginning of the school year for academic learning, they had better participation in remote learning activities.
▪ Most K-12 teachers did not encourage classroom teaching/learning strategies or routines to be used at home during COVID.
▪ Some K-12 teachers struggled with how to support their students on IEPs and ELLs.
▪ Most K-12 schools did not sharing data privacy information with caregivers or teachers.
▪ Middle school students were less likely to fully participate in remote learning than high school or elementary aged students.
Trends

**K-12 Schools that were 1:1 (one device for every child in district)...**

- Had more participation in remote learning than schools that were not 1:1.
- Were more likely to have fluid continuity of learning between school and home prior to COVID and during COVID.
- Used tools that were more accessible to students at home during COVID.
- Were more likely to have shared student data privacy information with caregivers and teachers.
- Had students who were more independent in their remote learning during COVID.

**K-12 Schools that began remote learning early (within a week of school closing)**

- Were more likely to have a higher percentage of student participation in remote learning activities than schools that began later during the COVID shutdown (5+ weeks).

**Title 1 Schools...**

- The students were less likely to fully participate in remote learning than non-title 1 schools.
- Were more likely to begin remote learning later (4+ weeks) than non-title 1 schools.
- Students were less likely to use classroom technology tools at home prior to COVID, compared to students in non title-1 schools.
Trends

**K-12 Teachers who were encouraging school learning strategies and routines at home during COVID**

- Had more participation in remote learning than teachers who were not the same ones.

**K-12 Teachers who were encouraging and using the same communication tools and routines during COVID**

- Had more participation in remote learning than teachers who were not using the same ones.

**Children in Grades P-5...**

- Were less likely to fully participate in remote learning during COVID than students in grades 9-12.
Recommendations

1. Schools should consider developing 1:1 programs if they do not currently have them, in particular Title 1 schools.
2. Schools that start online learning earlier and on schedule may have more participation than those that wait to begin.
3. Schools should include blended and online learning tools and devices as part of IEPs for students with exceptionalities, and prepare general education teachers to know how to use assistive technologies.
4. Schools should encourage teachers to use school learning strategies and routines at home.
5. Schools should encourage teachers to use the same communication tools and routines during COVID.
6. Schools should provide PD for teachers less on how to use tools, and more on good pedagogy when using digital tools for online and blended learning.
7. Schools need to do a better job sharing information to teachers and caregivers around student data privacy, copyright and student anonymity online.
8. Schools and teachers should work more to integrate students cultural and community capital into classroom learning through communication digital tools (and with consistency).
9. Teachers should try to use a learning management system from the beginning of the school year for academic learning.
10. Teachers should be careful not to overwhelm caregivers/students with too many digital applications (more than 5).