



# Instructional Technology

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BOE Presentation 1/20/2021

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Mr. Thomas Lynch



# Presentation Outline

- Student Devices
- Tech Support
- Smart Schools Wiring
- Infrastructure
- SAMR Model, Instruction and Examples
- Supports
- Looking Ahead





# iPads

Every student in grades K - 2 has their own individual iPad

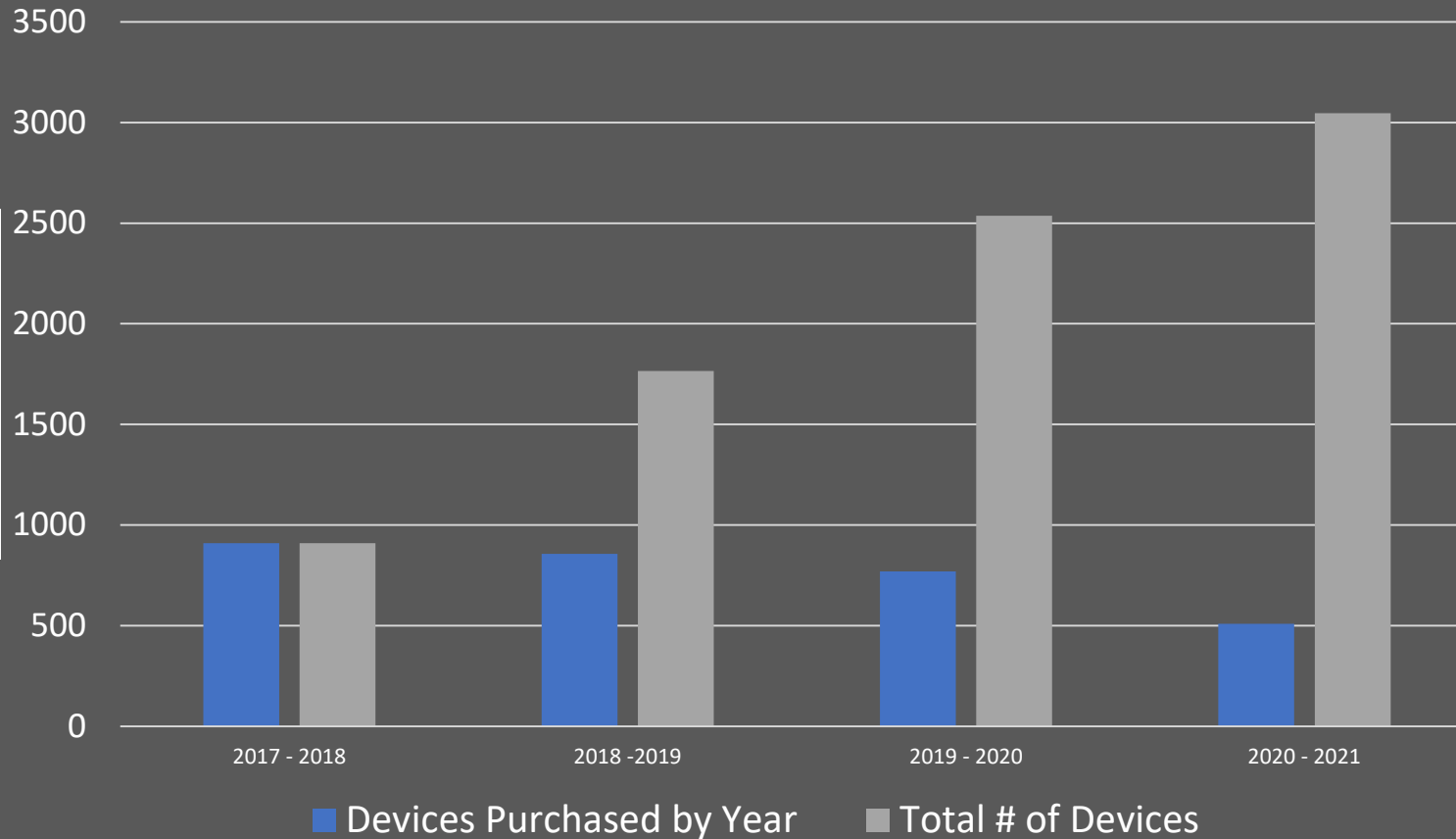


# Laptops

Every student, grades 3 – 12, has their own individual laptop.

# Paradigm Shift in Instruction and Technology

## Number of New Devices



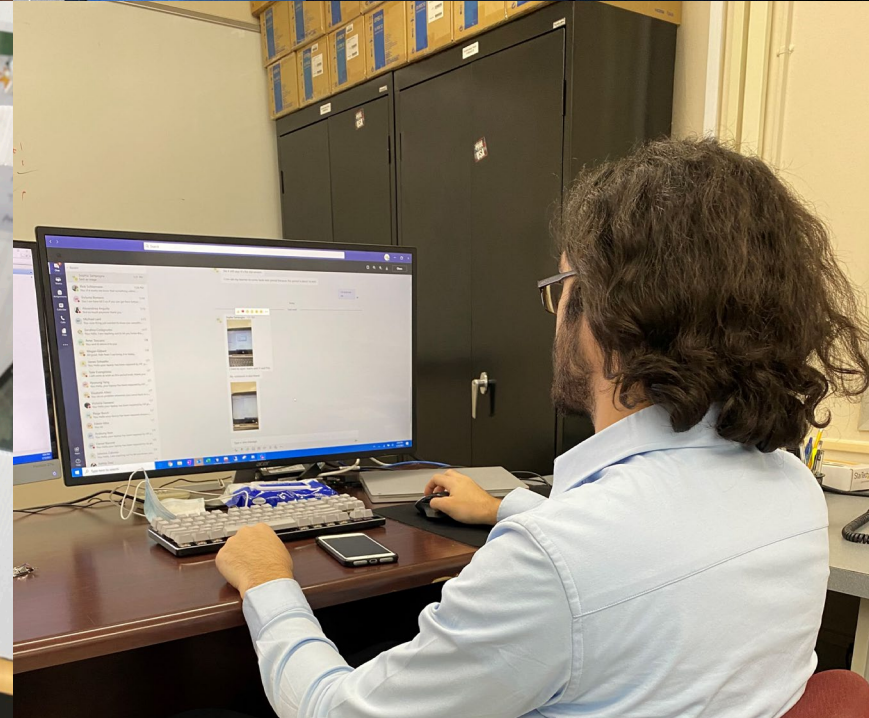
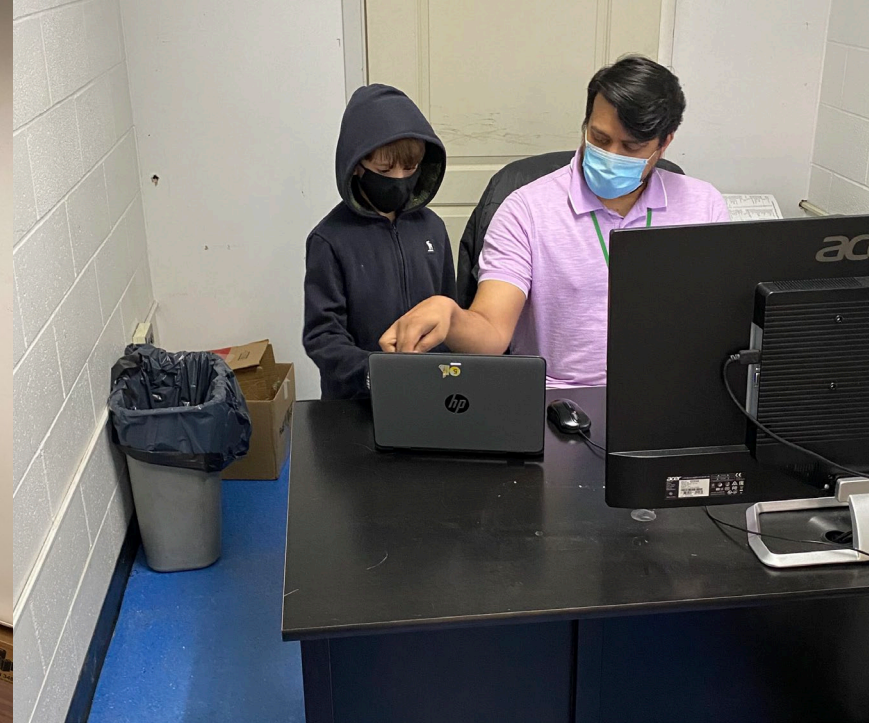
\*During the 2016 – 2017 school year there were no 1-1 devices

# Support

Each building has a Tech Depot that is staffed by a computer technician.

These technicians support teachers, students, administrators and parents with software and hardware issues.

On average, our techs handle 60 support requests from staff and students daily.





# Smart Schools Wiring

The rewiring of the district (with CAT 6A) will allow for more capacity at faster speeds.

# Smart Schools Wiring

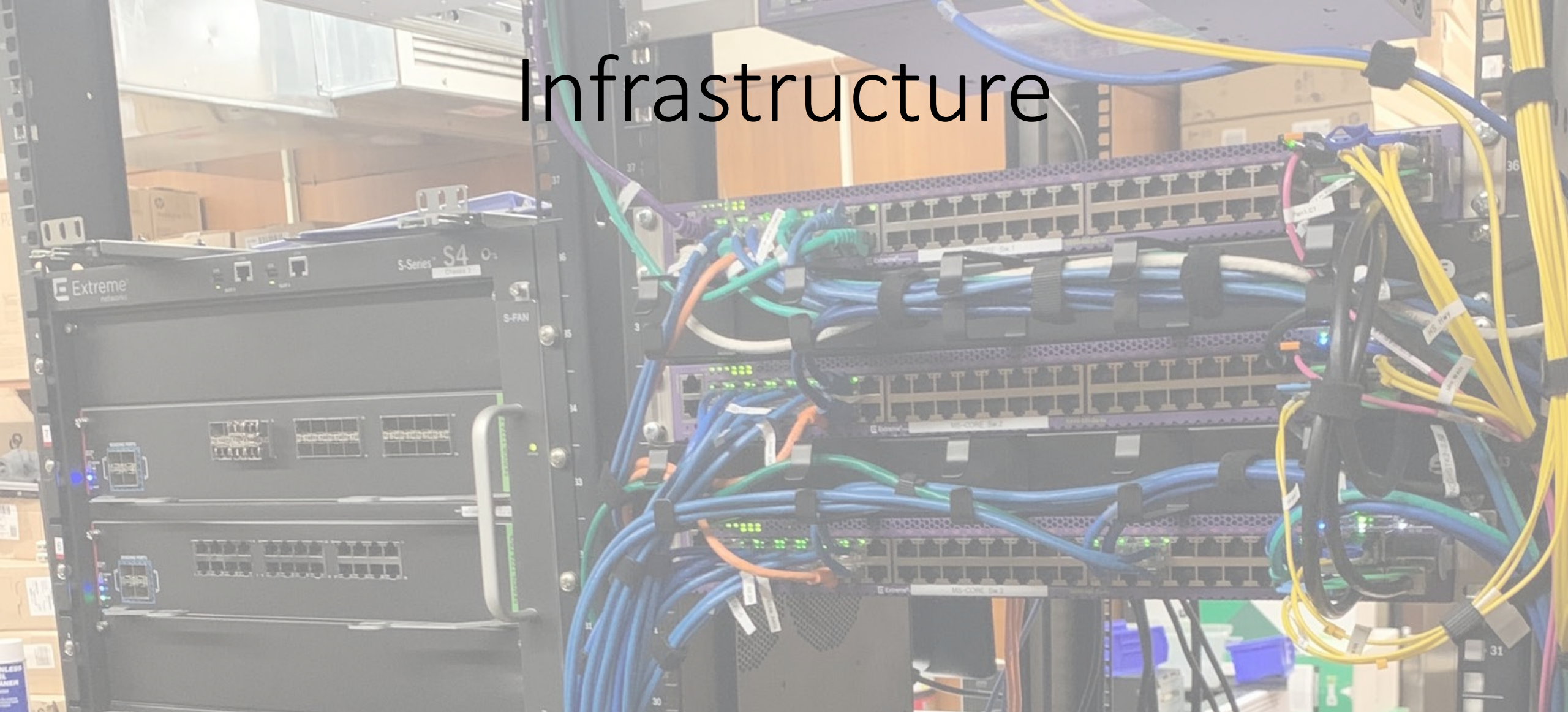
By color coding both the cables and drops as well as proper labeling, any issues can be taken care of expeditiously.

Example: Wireless access points are purple and data drops are blue.





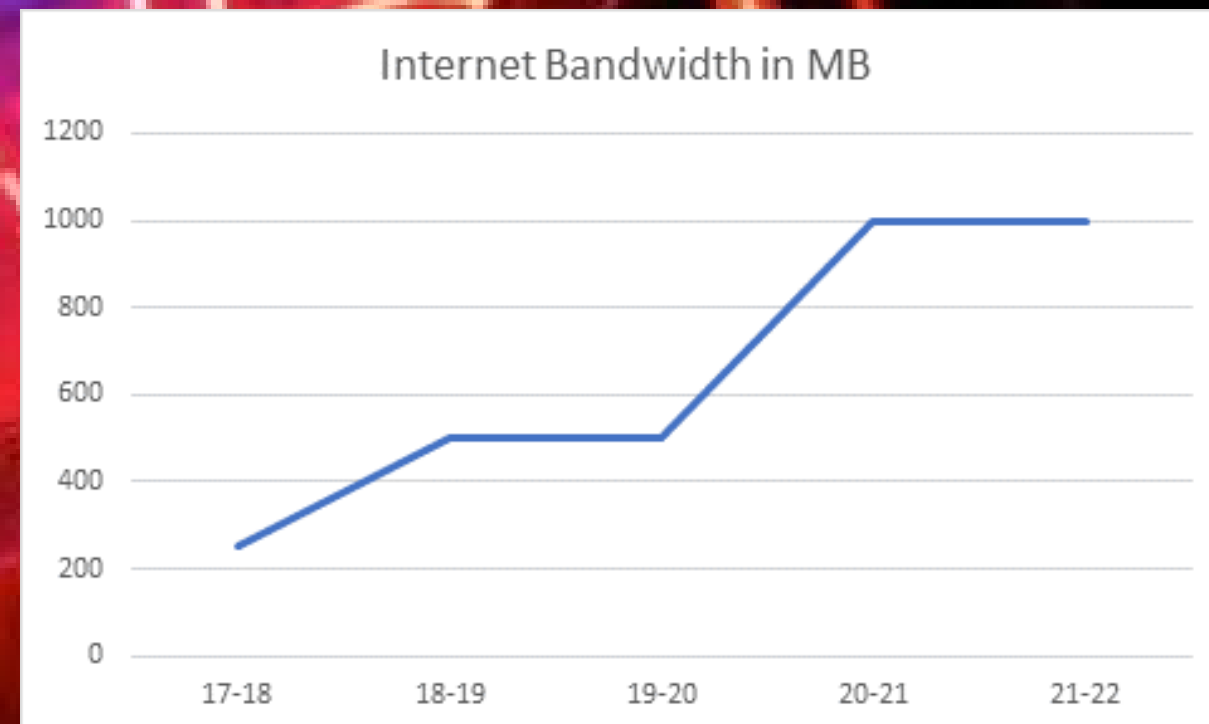
# Infrastructure

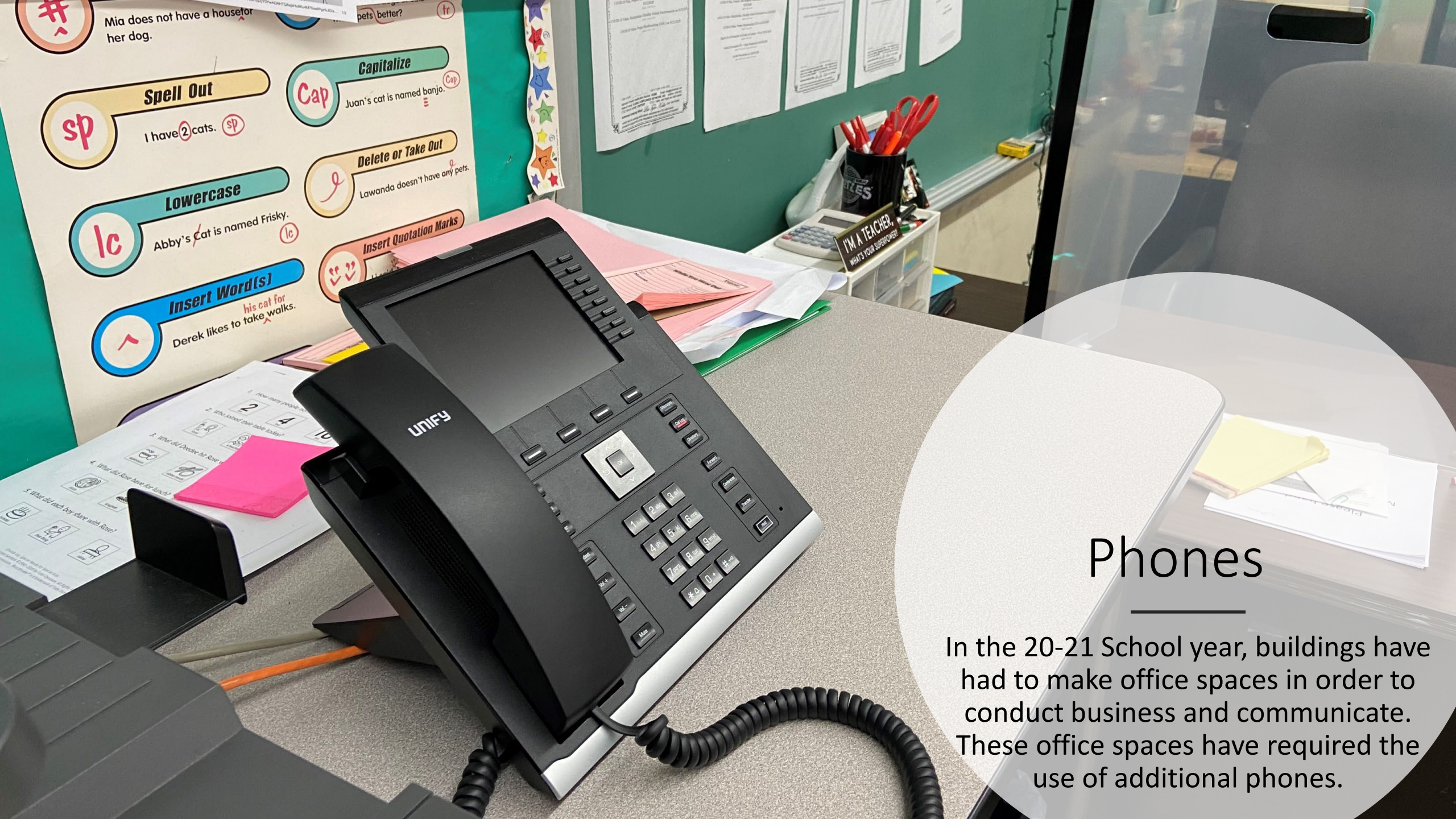


The new infrastructure allows us more capacity and higher throughput. The more users there are the greater the need. The new devices are more energy friendly and generate less heat.

# Internet Bandwidth

As the number of devices increases so does the need for higher internet bandwidth.





# Phones

In the 20-21 School year, buildings have had to make office spaces in order to conduct business and communicate. These office spaces have required the use of additional phones.

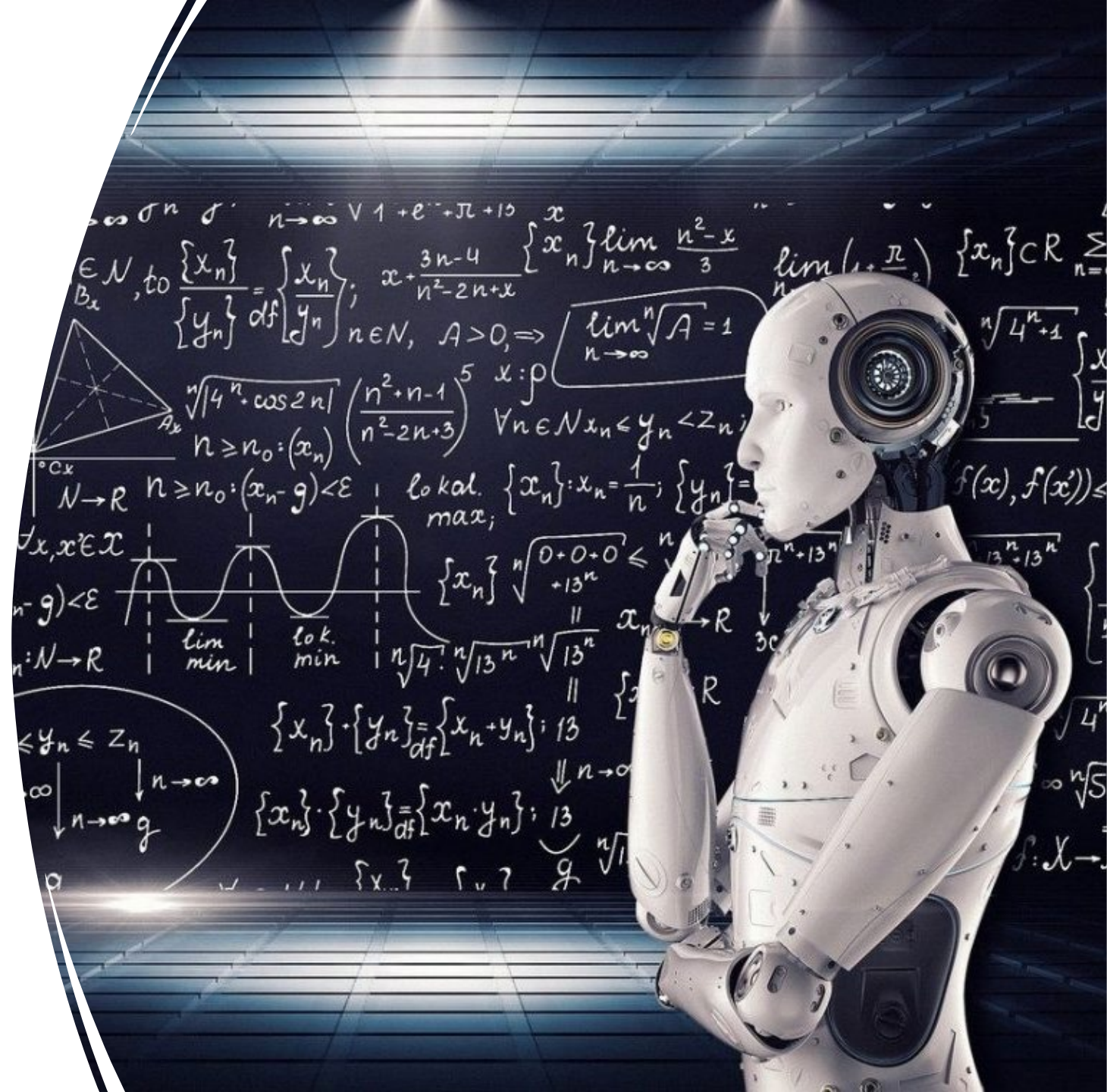
# Future

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Seaford is always planning and preparing for what lies ahead.







The focus for the next couple of years, starting with the 2022 - 2023 school year and onward, older/obsolete devices will be phased out and be refreshed with newer ones.

The next slide provides an example.



# Five Year Replacement Plan

	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24-25	25-26	26-27	27-28	28-29	29-30
6th	New (Year 1)	New	New	New				Year 3					
7th		Year 2				New	New	New	Year 4				
8th			Year 3							Year 5			
9th	New	New	New	Year 4							New	New	New
10th					Year 5								
11th						New Device Again	New	New	New				
12th							Year 2				New	New	New

	2017 – 2018	2018 – 2019	2019 – 2020	2020 – 2021	2021 – 2022	2022 - 2023
Grade	6 <sup>th</sup>	7 <sup>th</sup>	8 <sup>th</sup>	9 <sup>th</sup>	10 <sup>th</sup>	11 <sup>th</sup>
						

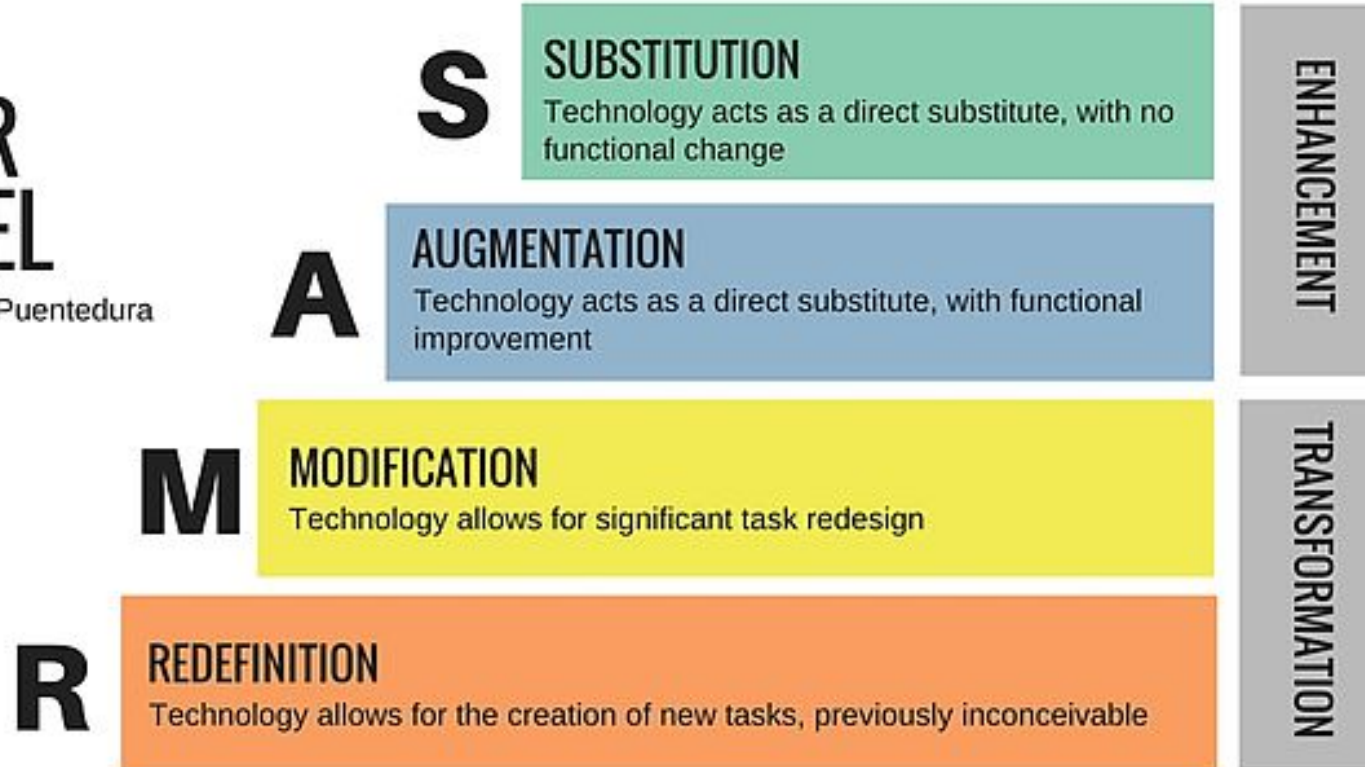
# Putting Seaford's Technology to Use



# The SAMR Model Shifts the Use of Technology in Instruction

## THE SAMR MODEL

Dr. Ruben R. Puentedura



# Uniformity of Platforms

## Kindergarten – Second Grade

- Student Device: iPad
- Instructional Software: Seesaw
- Remote Instruction: Zoom

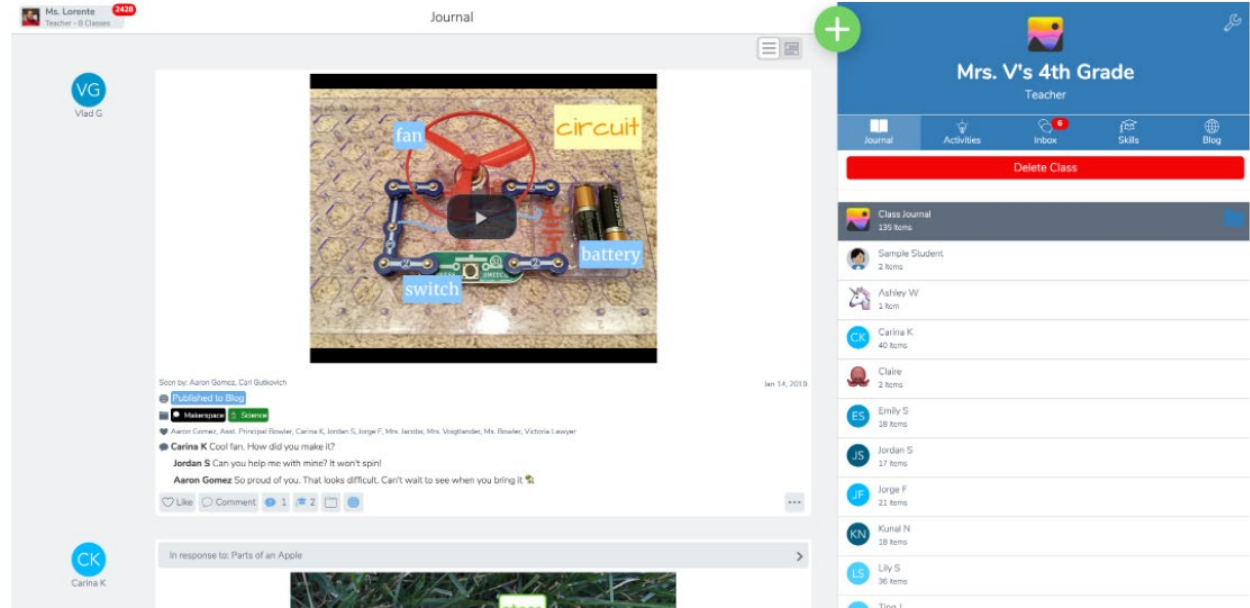


## Third Grade – Twelve Grade

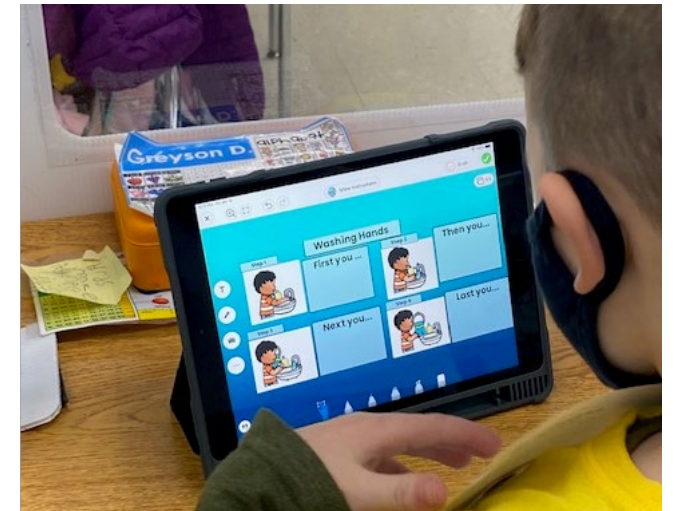
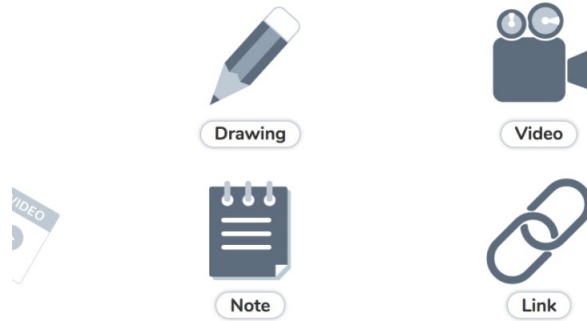
- Student Device: Laptop
- Instructional Software: TEAMS
- Remote Instruction: TEAMS







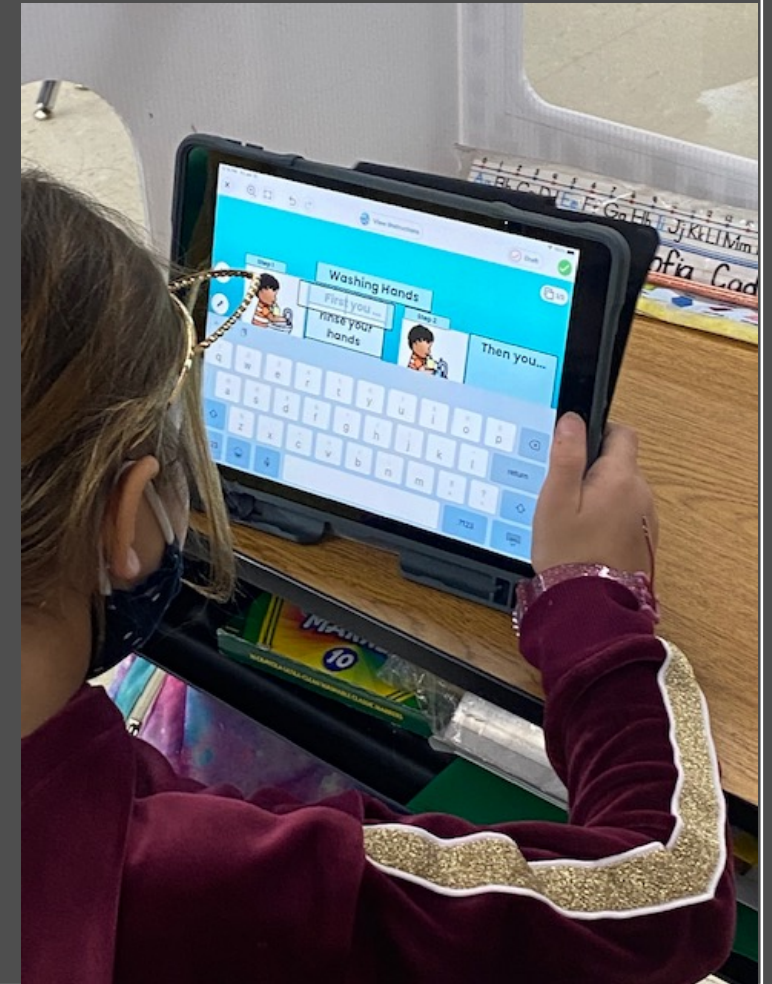
### Post To Student Journal

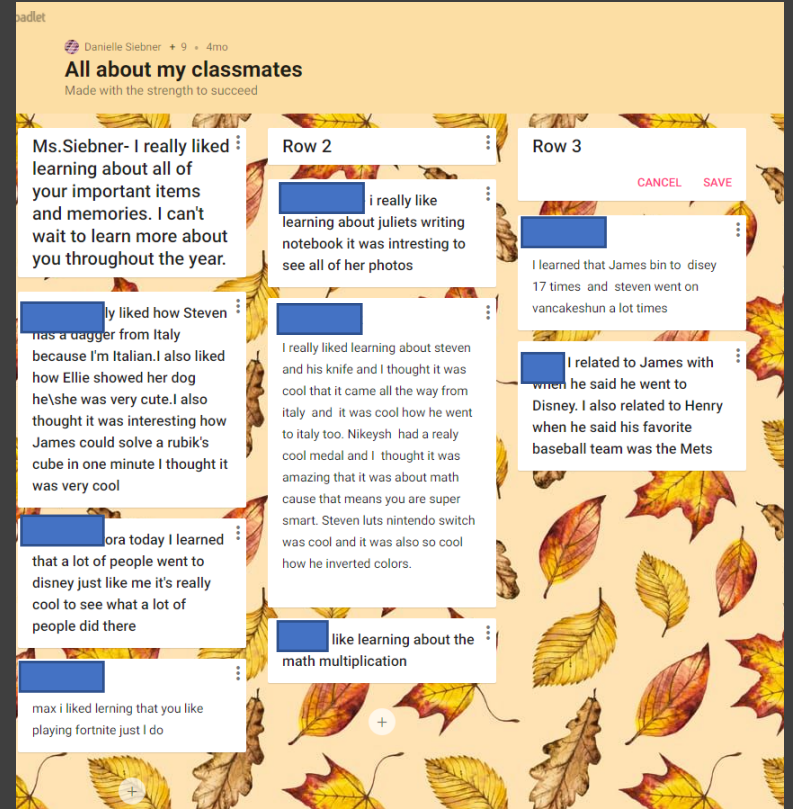
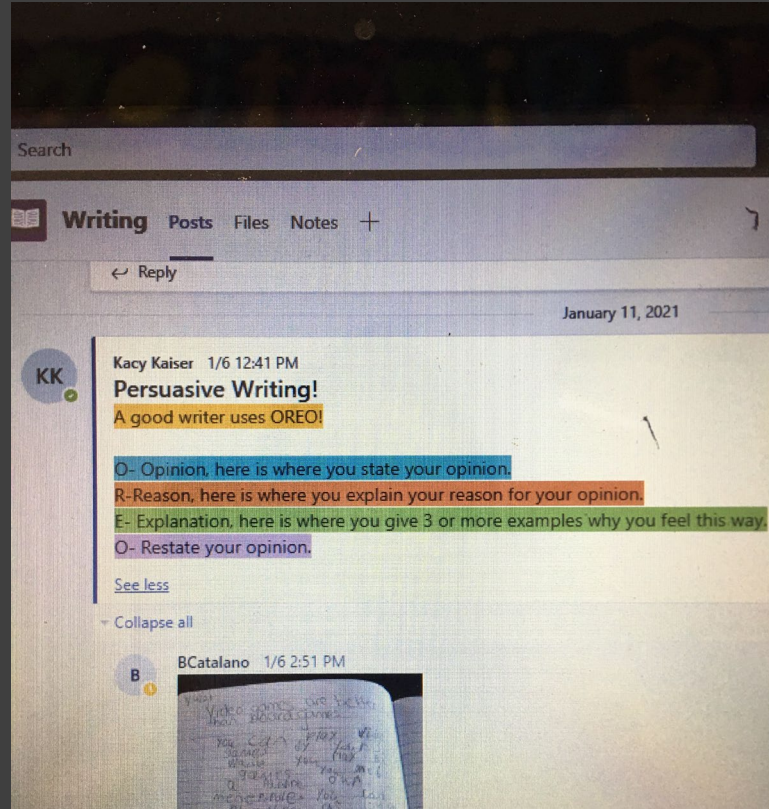
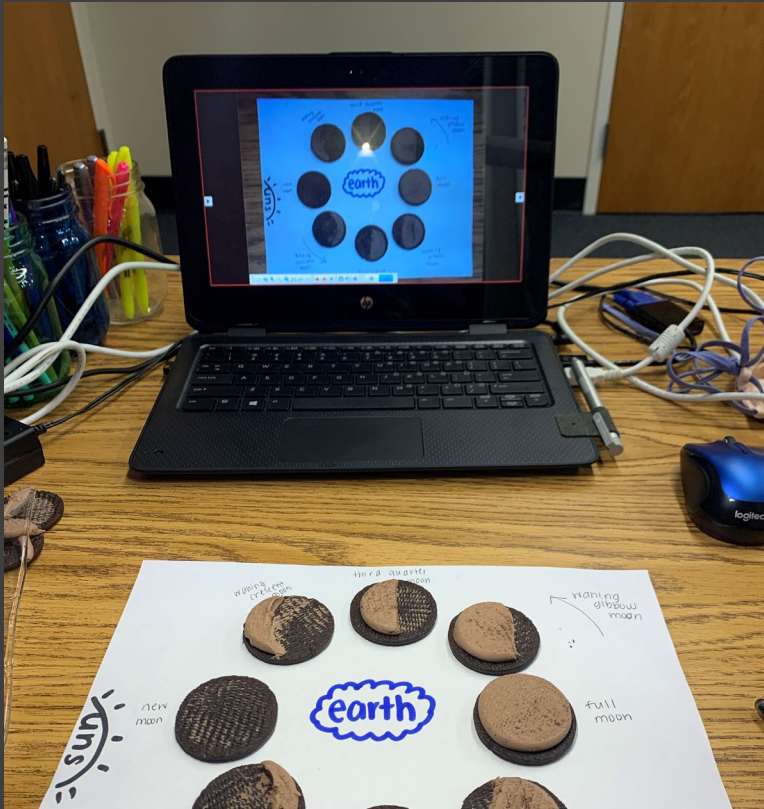




Seesaw works on not only the District-issued iPads but on any computer or mobile device.

Over the past week, K – 2 teachers and students have made over 1600 postings.





# Teams: Elementary Level





# Teams: Secondary Level





# Instructional Software: New for 2020 - 2021



cover

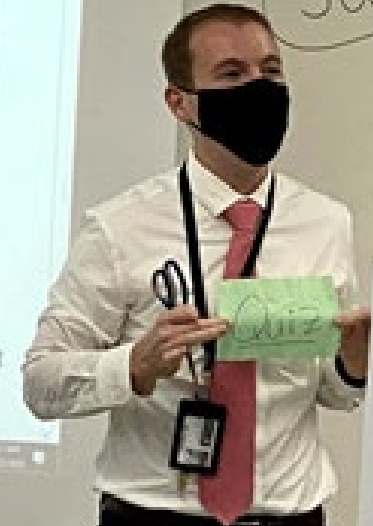
SWBAT



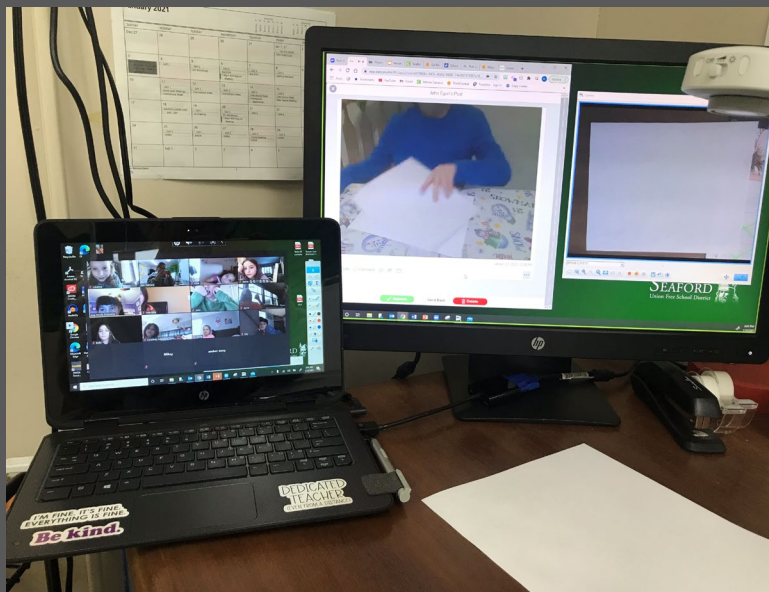
SC

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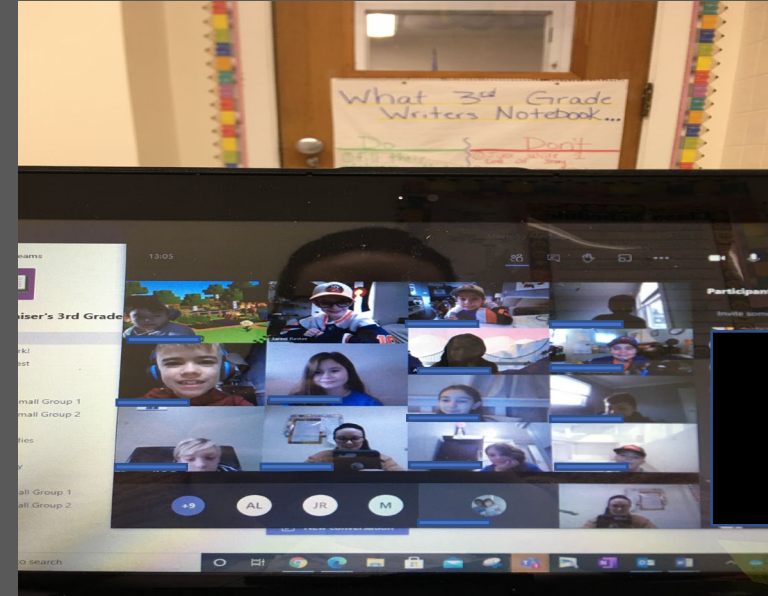
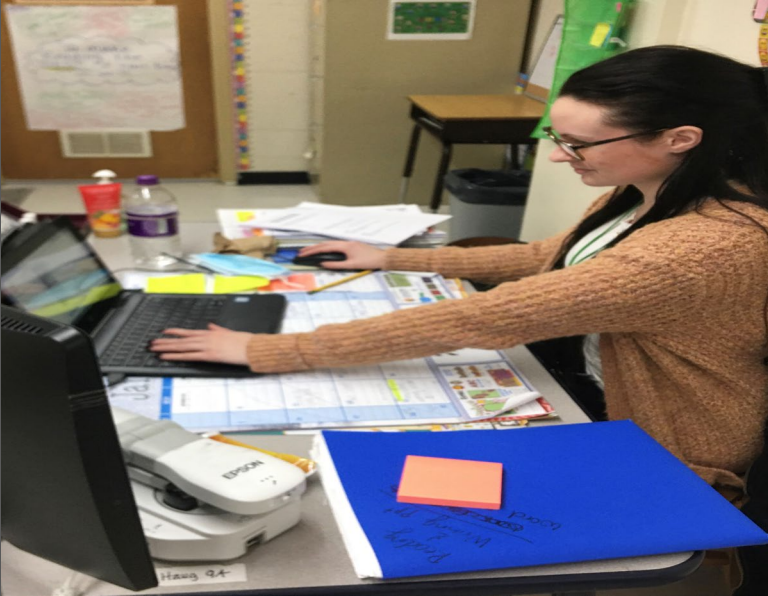
Live-streaming Classes



# Remote Educators: K - 2



# Remote Educators: 3 - 5







Supporting Teachers, Parents and Students

# Supporting Teachers

## — Tech Resources for Teachers

**Assessments**

**Communications**

**Microsoft Products**

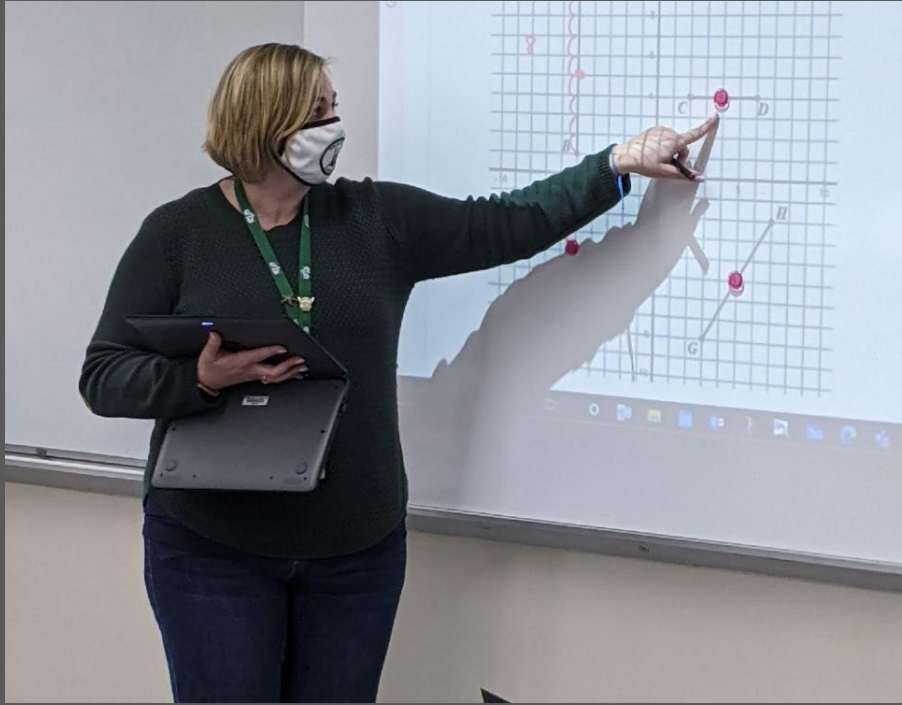
**+ Platforms**



To succeed in the new learning environment, teachers have made use of the following:

- Model School Days (45+ in the last 12 months)
- Training by District personnel (45+ in the last 12 months)
- Training by colleagues (ongoing)
- Working with our District Technicians and Mentors (ongoing)

In addition, with the help of Ms. McCloskey, a website resource has been created for teacher reference.



Computer Mentors

# Supporting Parents

To help parents with both in school and remote learners, the following support have been put in place:

- Ask a *Tech Parent* via Microsoft Teams for elementary issues
- District Website for Parent Technology Resources
- Access to our District Technicians and the Technology Office

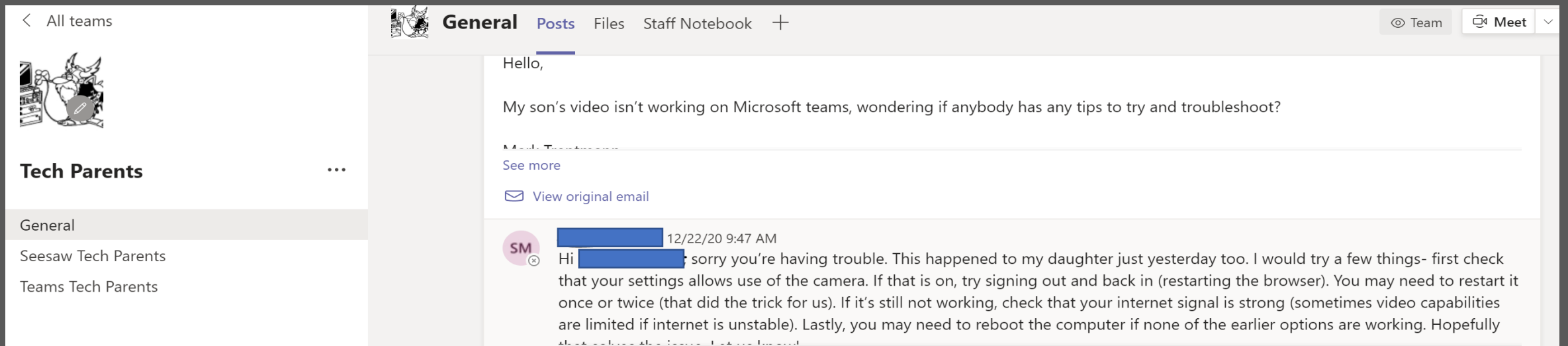
+ Seaford's Personal Digitized Learning Environment

+ Microsoft Office 365

+ SeeSaw (Grades K-2)

Resources for Microsoft Teams

Tech Tips



The screenshot shows a Microsoft Teams interface. On the left, a sidebar lists 'All teams' with a back arrow, and a list of channels: 'Tech Parents' (with a profile picture of a person with a headset), 'General', 'Seesaw Tech Parents', and 'Teams Tech Parents'. The main area shows a chat in the 'General' channel. The chat header includes 'General', 'Posts', 'Files', 'Staff Notebook', and a plus sign. On the right, there are buttons for 'Team' and 'Meet'. The chat content shows a message starting with 'Hello,' followed by 'My son's video isn't working on Microsoft teams, wondering if anybody has any tips to try and troubleshoot?'. Below this is a 'See more' link and a 'View original email' link. A response from a user with initials 'SM' and a profile picture of a person with a headset is dated '12/22/20 9:47 AM'. The response text reads: 'Hi [redacted] sorry you're having trouble. This happened to my daughter just yesterday too. I would try a few things- first check that your settings allows use of the camera. If that is on, try signing out and back in (restarting the browser). You may need to restart it once or twice (that did the trick for us). If it's still not working, check that your internet signal is strong (sometimes video capabilities are limited if internet is unstable). Lastly, you may need to reboot the computer if none of the earlier options are working. Hopefully that solves the issue. Let me know.'

# Supporting Students

- Many teachers have been able to provide ‘on the spot’ support for their students
- Student training by District personnel
- Computer technicians
- Student technicians



Photo taken September 2019

# Looking Ahead...



## Digital Portfolio

# Budgetary Considerations 2021 – 2022 and Next Steps

- Finalizing the second phase of updating the District Infrastructure
- Continuing to replace SmartBoards with Epson Projectors
- Continuing Model School Days for professional development
- Reconvening of the Technology Steering Committee in 2021 - 2022 to evaluate current systems and explore future devices for faculty and students
- Starting in 2022 - 2023, the district will begin replacing devices that were initially distributed in 2017 - 2018 and will follow a replacement schedule for subsequent years