Putnam Valley Technology 2021-2022

Building a Foundation for the Future

January 7, 2021
Michael N. Lee, CIO

"The best preparation for tomorrow, is doing your best today."

-H. Jackson Brown, Jr.

Life in 2020 😷
Google Workspace

- Professional Development
  - Preparing for Remote Learning
  - Parent Tech Info Workshop (English and ENL)
  - Superintendent Conference Day Tech Support
  - Drop-In Virtual Live Sessions
  - Best Practices in Remote Learning / Any Topic

Remember this?

From last year's presentation:

- Classrooms everywhere are more connected
  - The system is the network
    - Upgraded infrastructure to meet future connectivity needs

Who knew the future was going to be 2020?

Compare Usage

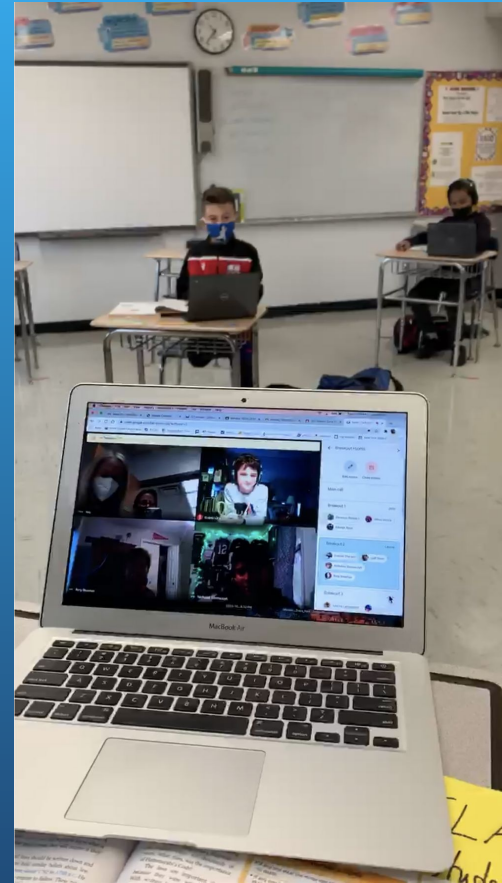*COVID Year = 2020-2021 school year so far to keep measurement period the same

Pre COVID	COVID
Google Classrooms Created: Around 500	Google Classrooms Created: 837
Documents Shared: 73,044	Documents Shared: 542,798
Google Docs: 67,497	Google Docs: 170,843
Google Slides: 10,275	Google Slides: 82,832
Google Sheets: 3,715	Google Sheets: 7,577
Google Forms: 1,268	Google Forms: 3,474
Google Drawings: N/A	Google Drawings: 1,108

Year of Firsts

- Complete Deployment
  - All Devices (K-12) remotely deployed

- Helping the Community
  - Providing Internet to households in need through Altice (Optimum)

- Google Meet
  - Average of 1,100 users on Google Meet daily
  - Number of Teacher/Staff hosted Meets: 43,547
  - Teachers/Staff collectively spent 3.8 years in Meet
  - Each Meet lasts an average of 45.8 minutes

Bandwidth Use

- Pre Covid:
  - Around 270 Mbps

- Current Average:
  - Around 685 Mbps

Tech: Internal Growth and Contributions
Improvements that help the temporary "new normal"

- QR Codes everywhere

- Custom built COVID dashboard

  - Comparable app, minimum $5,000

- Streamlined internal processes

  - Rapid Laptop Deployment & Retrieval Capability at the ES
  - Rapid Laptop / Chromebook turnaround in all buildings

- Develop in-house "operations" capability

  - Fire / Security / Access Control
  - Reduce dependence on outside companies

Infrastructure Highlights
Working Closely with Operations

- **High School**
  - Replace Fire Alarm System

- **MS Renovation**
  - New PA System & Speakers
  - New Access Control
  - New A/V in Cafeteria

- **Wellness Center**
  - Dedicated data closet
  - New PA System & Speakers
  - New Access Control
  - New A/V

Staffing 2021-2022

- 1 CIO
- 1 Media / AV Tech Support Specialist
- 4 District Computer Specialists
  - 3.4 FTE
- 1 BOCES Junior Computer Specialist (required for aid)
  - 1.0 FTE (aidable) (Welcome Ed Nowicki, PV Alumni)

Support over 2650 laptops, 615 Chromebooks, 200 printers, 230 iPads, 110 projectors, 75 smart boards, 22 Interactive Displays

Overview of Expenses

- Network and Server Support Agreements
  - Internet Connection
  - Content Filter
  - Network Equipment
- Staff Attendance
- Professional Development
- State Reporting
- Test Scoring
- Financial System
- Security System
  - Cameras
  - DVR System
  - Access Control Systems

Overview of Expenses

- Printer / Copier supplies
- Projectors and Bulbs
- Interactive Displays / TVs
- Laptop Sleeves
- Spare Cables
- Spare Hard Drives
- Curriculum Software to support Remote Learning

Overview of Expenses

- Laptops / Chromebooks
  - Allocation TBD
- New construction / renovation equipment
  - Network Infrastructure
  - Security & Access Control
  - A/V Equipment
- Financial Details (preliminary)
  - BOCES IPA: $250,000 @ 3.5% over 5 Years
    - (Installment Purchase Agreement)
  - 2021-2022 Budget Impact of IPA: $56,000 (LHRIC Estimate)
  - Aid Ratio: 65%

Looking Forward

- To Complete
  - MS Renovation
  - ES Auditorium (A/V)
  - Wellness Center

- To Plan for (2023-2024)
  - New ESXi Hosts (for VMs)
  - New NetApp Storage
    - Purchase via BOCES IPA
    - No Budget-to-Budget Impact

"The best preparation for tomorrow, is doing your best today."

-H. Jackson Brown, Jr.

Thank You