Putnam Valley Technology 2020-2021

"Building a Foundation for the Future"

January 9, 2020 Michael N. Lee, CIO



- Ongoing G-Suite Professional Development
 - Staff Training and Integration
 - Email Calendar Drive Docs Contacts Forms
 - Students
 - Email Calendar Drive Docs Classroom

G-Suite has improved and streamlined internal processes

- New request & approval system for club and stipend positions
- Streamlined field trip request and planning system
 - Deployed to all buildings
 - Nearly 40 trips planned so far
- Centralized Request Approval Process
 - Designed for easy expansion
 - Food, videography, etc...

G-Suite in the classroom and beyond

- Over 500 Google Classrooms created this school year
 - Over 15,000 posts by teachers
 - Internal Professional development
 - Day-to-day activities (homework / do now)
 - Clubs, sports, activities
 - Centralize communications
 - Distribute handouts

G-Suite in the classroom and beyond

- Fun Statistics
 - 73,044 documents shared so far this year
 - 67,497 Google Docs
 - 10,275 Google Slides
 - o 3,715 Google Sheets
 - 1,268 Google Forms

G-Suite improves parent communications

- HS automated drop notification form
 - Guidance counselor fills out form
 - Generates emails with reason for drop
 - Parents
 - Teacher
 - Encourages conversations
 - Easy communication back to guidance via simple "reply"

- Chromebook Integration
 - 5th, 6th, and 7th Grade
 - Feedback
 - Extremely easy to use
 - Few distractions
 - Student work is all in one place
 - Consistent experience across devices
 - Expand Integration 2020-2021
 - 8th Grade
 - MS Students Entirely Chromebook



Students working on Chromebooks in the Active Learning Lab

Security Enhancements

- •ES classroom phones
 - Integrate into district-wide security / notification network
- VOIP Phone lockdown integration
- Radio to PA integration

- Expanded Network
 - Highfields pump station
 - Football field & Softball field
- Enhanced Network
 - HS Gym
- PAC lighting network
 - Self contained network for new lighting system

- Data Privacy and Security
 - Cisco NextGen Firepower reports
 - Cisco AMP Advanced Malware Protection
 - Crowdsourced intelligence
 - Cybersecurity training
 - Don't click on Spam!
 - Ed Law §2-D Unauthorized release of personally identifiable information
 - Ensure district and vendor compliance
- Data Protection / Privacy Officer
 - Attending NIST Workshop @ PNW BOCES
 - Create district profile
 - Build framework documents to help:
 - Identify, protect, detect, respond, recover
 - (NIST Core)

Looking Forward

Trends

- More....
 - Collaboration
 - Interactivity
 - Augmented Reality
 - Devices with multitouch
 - Gamification
 - Personal Example: Math Minutes + Ice Cream
- Classrooms everywhere are more connected
 - The system is the network
 - Smart Schools
 - Upgraded infrastructure to meet future connectivity needs

Grade 5



Design, build, and test your ATV track.



Essential Question

How can we design a challenging obstacle course for the 2018 Hess Truck ATV?

Grade 7

Design and create something that fulfills a need.

Maddie created a personalized dog tag for her pup, "Murphy."

Lauren created a "working" crochet hook.



Essential Question

Using Tinkercad, an autocad application, what can you create that fulfills a need?

Grade 8



Invent, code, design, and create with Makey

Makey

Using the Engineering by Design Process, students brainstorm, research, create, build, test, and present a "new" project/invention.

Staffing 2020-2021

- 1 CIO
- 1 Media / AV Tech Support Specialist
- 4 District Computer Specialists
 - 3.4 FTE
- 2 BOCES Junior Computer Specialists (required for aid)
 - 1.0 FTE (aidable)

Support over 2500 laptops, 442 Chromebooks, 200 printers, 230 iPads, 110 projectors, 75 smart boards, 15 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 Upgrades
 - Cameras
 - DVR System
 - Access Control Systems

Overview of Expenses

- Printer / Copier supplies
- Projectors and Bulbs
- Laptop Sleeves
- Spare Cables
- Spare Hard Drives

Overview of Expenses

- Chromebooks
 - One Grade Level
 - MS Students all Chromebook
- New construction / renovation equipment
 - Network Infrastructure
 - Security & Access Control
- Financial Details (preliminary)
 - BOCES IPA: \$250,000 @ 3.5% over 5 Years
 - (Installment Purchase Agreement)
 - 2020-2021 Budget Impact of IPA: \$56,000 (LHRIC Estimate)
 - Aid Ratio: 65%
 - Chromebook cost after aid: \$101



Thank You