Oyster Bay East-Norwich Instructional Technology Update

January 19, 2021

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Vision:

At Oyster Bay-East Norwich, teachers and students are encouraged to **find and incorporate the most beneficial technologies available to enhance instruction**. While preparing all students with the skills to succeed in a rapidly evolving society, technology is optimally used in every classroom to **engage, excite, and personalize student learning**. Diverse technological tools and programs are available throughout the district to redefine opportunities for **meaningful individual and collaborative learning** both within the classroom and throughout the learning community.

Cybersecurity Update (12/17/19):

PHISHING

90% of detected attacks start with emails that trick users into revealing personal information or clicking on links that install harmful software.

"SPEAR" PHISHING

DDoS

A distributed denial of service (**DDoS**) attack occurs when multiple systems flood the bandwidth or resources of the district servers.

BREACH

The release of secure confidential information.

RANSOM-WARE

Malicious attack that encrypts district data with malware and requires a ransom to access. Software is often installed using credentials gained via targeted/spear phishing.

Cybersecurity :

VULNERABILITY MANAGEMENT — Patch known vulnerabilities on all systems, but in particular those systems that house sensitive data.

SYSTEM BACKUPS — Ensure backups for critical systems are in place and audit backups for completion and functionality.

SYSTEM HARDENING — Ensure anti-virus is installed and up-to-date, enable firewalls, close unnecessary ports, and disable non-essential services.

IDENTITY MANAGEMENT — Ensure accounts have appropriate permission levels. Domain Admin accounts should never be used to access workstations.
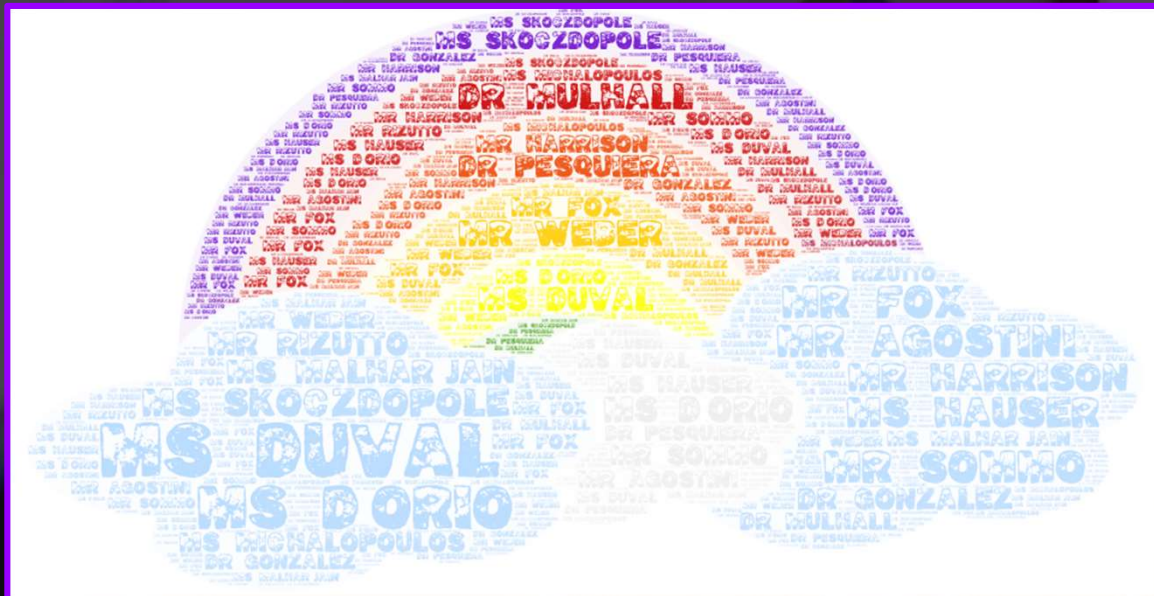
APPLICATION SECURITY — Only use district approved softwares, audit system access, and isolate critical infrastructure.
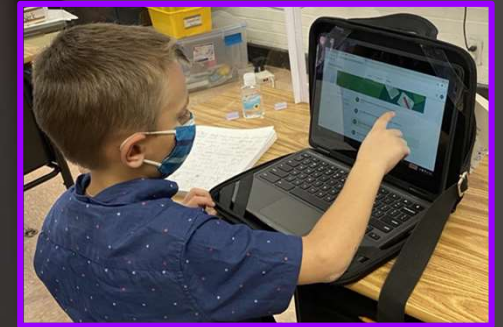
Technology Advisory Committee

- Phase 1 (2013-2016) Building Culture & Infrastructure
- Phase 2 (2015-2017) Innovation & Personalized Learning
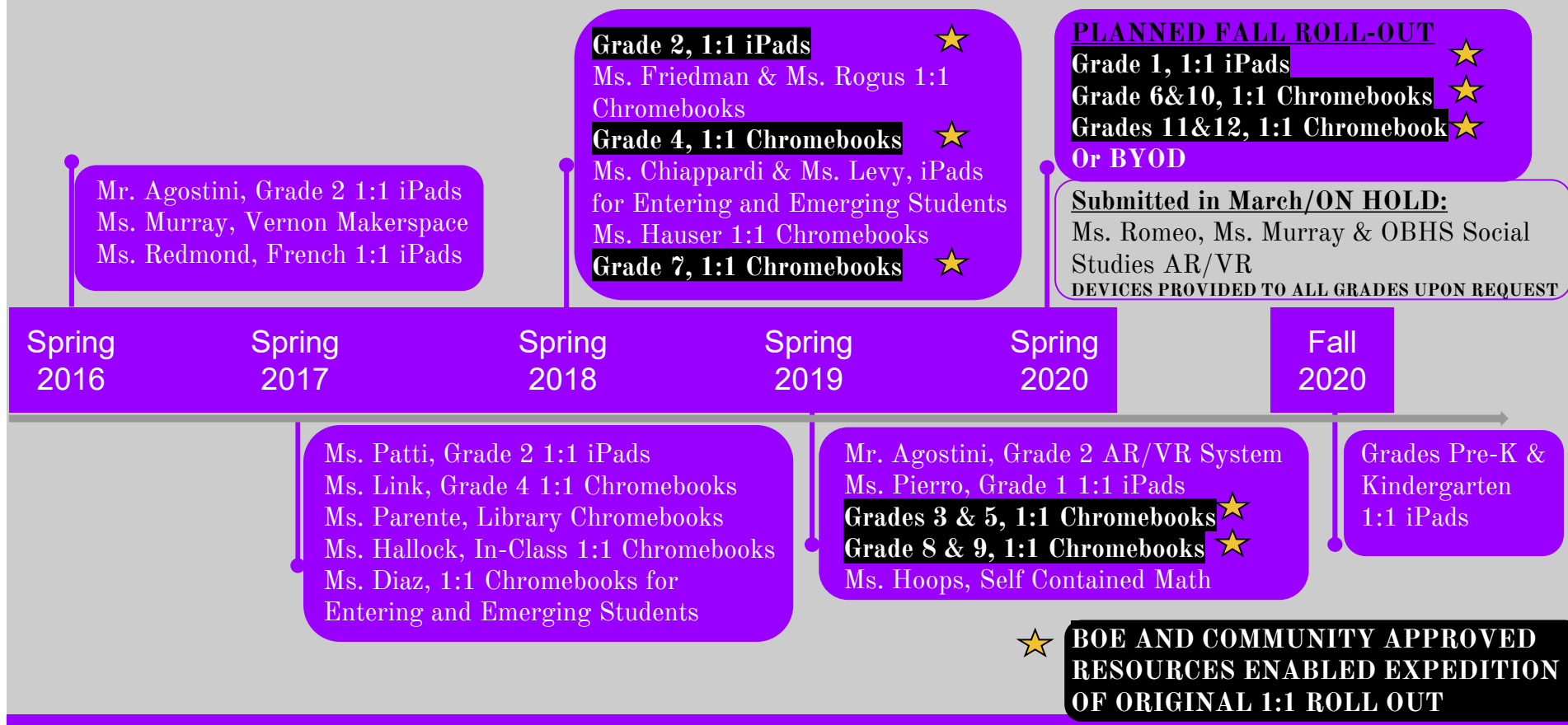- Phase 3 (2018-2020) Grade-Wide 1:1 Initiatives

Infrastructure

- **District-Wide Wireless Cabling Cat 6a (Capital Project, 2015)**

- **Uninterrupted Power Supplies, Switches, & Servers (Smart Bond, 2016)**

- **Closet Clean-up and Wireless Access Upgrade (e-Rate, 2021)**
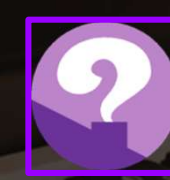
Internal Innovation Grants & 1:1 Initiatives

Grade 2, 1:1 iPads ⭐
Ms. Friedman & Ms. Rogus 1:1 Chromebooks
Grade 4, 1:1 Chromebooks ⭐
Ms. Chiappardi & Ms. Levy, iPads for Entering and Emerging Students
Ms. Hauser 1:1 Chromebooks
Grade 7, 1:1 Chromebooks ⭐

PLANNED FALL ROLL-OUT
Grade 1, 1:1 iPads ⭐
Grade 6&10, 1:1 Chromebooks ⭐
Grades 11&12, 1:1 Chromebook ⭐
Or BYOD

Submitted in March/ON HOLD:
Ms. Romeo, Ms. Murray & OBHS Social Studies AR/VR
DEVICES PROVIDED TO ALL GRADES UPON REQUEST

Mr. Agostini, Grade 2 1:1 iPads
Ms. Murray, Vernon Makerspace
Ms. Redmond, French 1:1 iPads

Spring 2016	Spring 2017	Spring 2018	Spring 2019	Spring 2020	Fall 2020

Ms. Patti, Grade 2 1:1 iPads
Ms. Link, Grade 4 1:1 Chromebooks
Ms. Parente, Library Chromebooks
Ms. Hallock, In-Class 1:1 Chromebooks
Ms. Diaz, 1:1 Chromebooks for Entering and Emerging Students

Mr. Agostini, Grade 2 AR/VR System
Ms. Pierro, Grade 1 1:1 iPads
Grades 3 & 5, 1:1 Chromebooks ⭐
Grade 8 & 9, 1:1 Chromebooks ⭐
Ms. Hoops, Self Contained Math

Grades Pre-K & Kindergarten 1:1 iPads

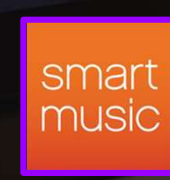⭐ **BOE AND COMMUNITY APPROVED RESOURCES ENABLED EXPEDITION OF ORIGINAL 1:1 ROLL OUT**
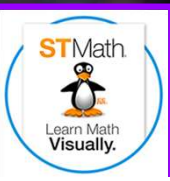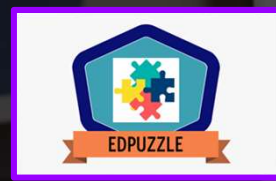
1:1 Device Access for All:

- Grades 3-12 Chromebooks
- Grades Pre-K-Grade 2 iPads

Software:

ClassLink

zoom

Google Meet

CANVAS

Discovery Education

SMART Learning Suite

IXL

Seesaw

Office 365 Education
Enhancing collaboration and productivity

nearpod

formative

CASTLE LEARNING

Pear Deck

BrainPOP

EDPUZZLE

GoGuardian

Linewize

Raz-Kids

FLIPGRID.

ST Math
Learn Math Visually.

Jamboard

smart music

myON

TypingClub
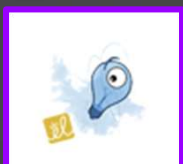
Professional Development:

- District-Wide (ex: Zoom, Data Privacy & Security Awareness Training)
- Departmental and Cohort-Based Training to Prepare for 1:1 Initiatives
- "Tech Camp"
- Model Schools Technology-Specific "Sessions"
- Summer In-Service Course (Canvas & Digital Engagement)
- Individual Coaching/Sign-Up
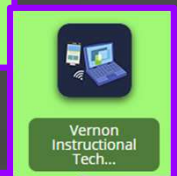
Learning Redefined:

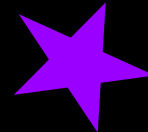| Learning, Device and Content Management	THEODORE ROOSEVELT ELEMENTARY	JAMES H. VERNON ELEMENTARY	OYSTER BAY HIGH SCHOOL
Learning Management	Seesaw	Google Classroom	Google Classroom & Canvas
Device Management	Meraki	Google Admin	Google Admin
Content Filtering	Linewize	GoGuardian	GoGuardian

Learning Redefined:

ACCESS FOR ALL

2020

Fine Tuning Technology to Personalize Learning
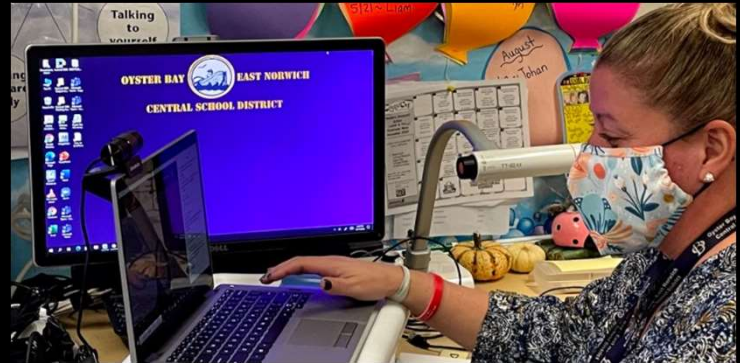
- Software Limitations
- Engagement and Student Voice
- Empowering Students