# INSTRUCTIONAL TECHNOLOGY

**BOARD OF EDUCATION PRESENTATION** 

FEBRUARY 16, 2022

MR. FRED KADEN, DIRECTOR OF TECHNOLOGY

MR. TOM LYNCH, EXECUTIVE DIRECTOR FOR INSTRUCTIONAL TECHNOLOGY AND STEM

#### TOPICS FOR TONIGHT'S PRESENTATION

- The Personalized Digital Learning (PDL) Environment
- Infrastructure Improvements
- Supports
- Instruction
- Looking Ahead

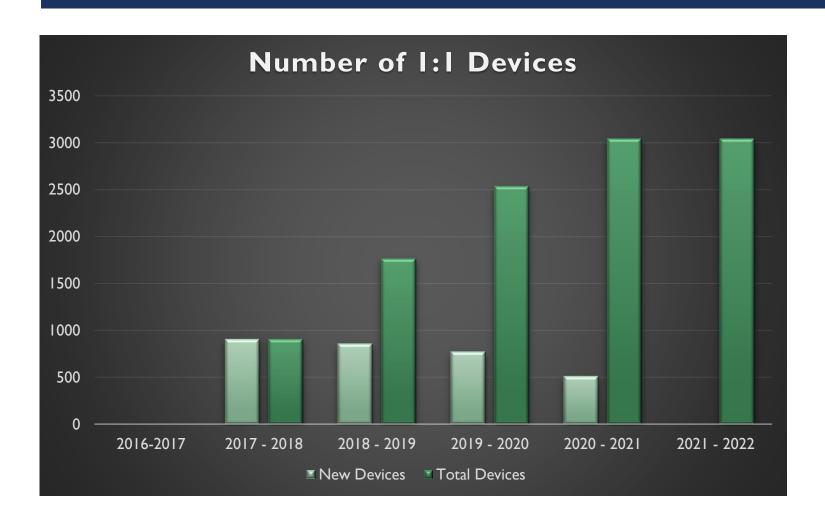






### Growth of the PDL Environment

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









# 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 C	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

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



Our new Extreme Access Points are 802.11ax. Each access point offers 5 – 10GB throughput, providing greater bandwidth, a more stable Wi-Fi connection and wider access



















All switches are POE (Power over Ethernet). They supply power to the phones and access points without an additional power supply. Using color coding scheme, which matches our cabling, we have a more organized approach to managing the network and better troubleshooting capabilities



















Our new updated virtual servers will meet the current demands of today's technology. This hardware is design to last us through the next 5 years and meet future demands of the network.



















The infrastructure work completed during the last two school years was possible by funding through the Smart Schools Bond Act and Seaford Budget. Funds supplied by the District are partially reimbursed (Instructional Devices through BOCES is 63% and the Administrative Fees is 54%) by Nassau BOCES the following budget year.













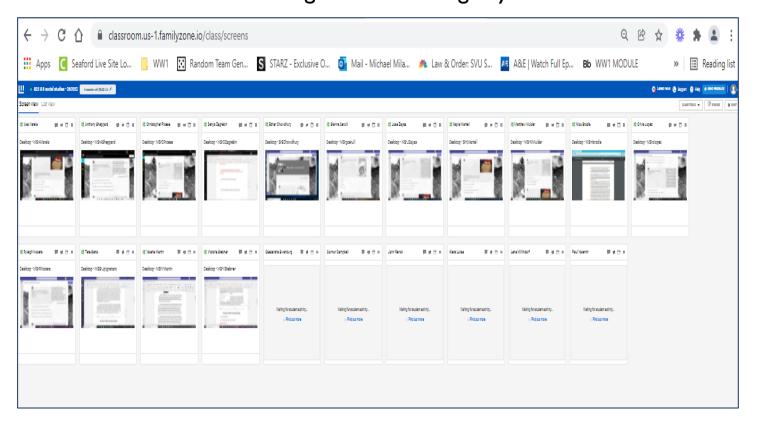




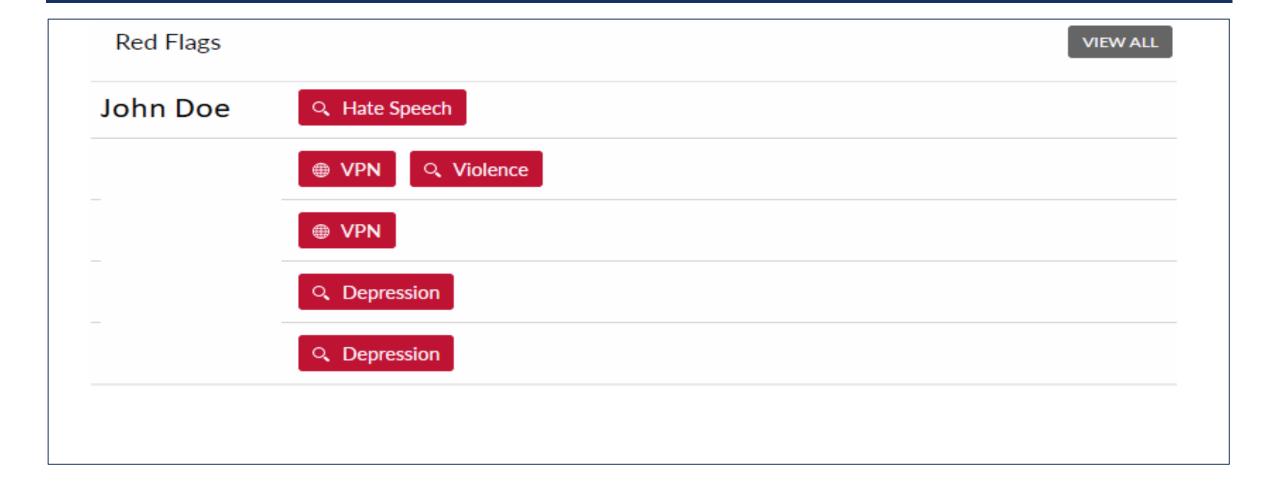
#### **KEEPING USERS SAFE**

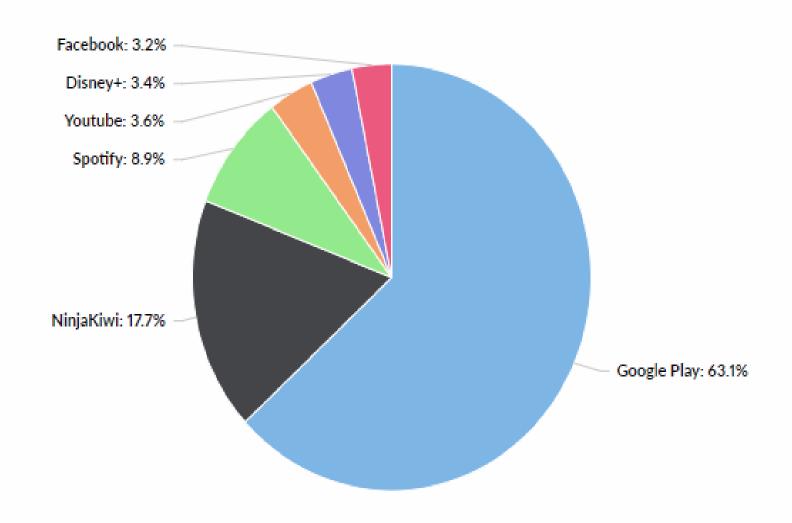
The Technology Department has several safeguards in place to keep students safe and focused on learning while using their district device. This includes real-time monitoring of student usage by the classroom teacher and the Technology

Department.



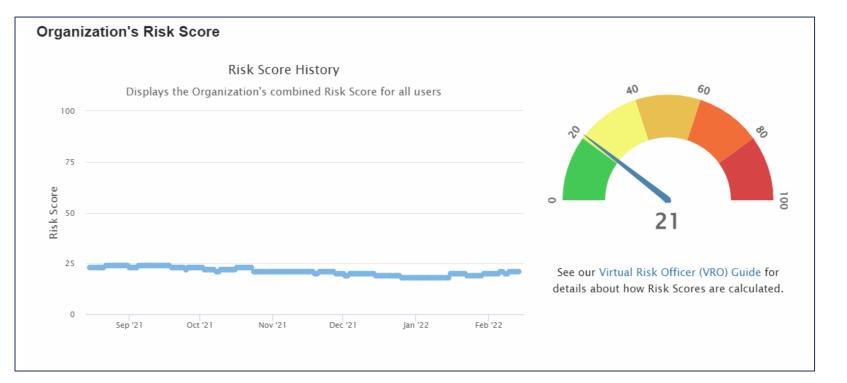
### **KEEPING USERS SAFE**





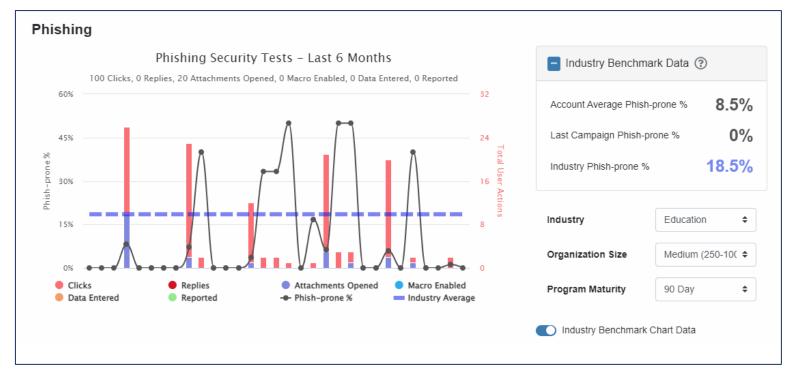
#### KEEPING THE NETWORK SAFE

In addition to keeping users safe, there are redundancies in connectivity to keep the network 'up and running' and additional resources tasked with protecting the network from Ransomware and viruses. This includes both non-network backup of data onsite and in the cloud. Staff are trained to be alert for phishing emails. Students can only receive email from users on the Seaford domain.



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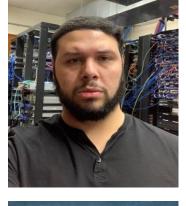








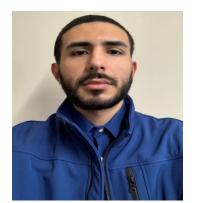














Model School Days – Offered through Nassau BOCES providing training on a wide-range of products. Training has been conducted both virtually and in-person. We have been working with Ms. JoAnn Donovan for the past three years.

#### Microsoft

- Office 365
- OneNote and Class Notebook
- Teams for Education

#### **Mobile Device Tools**

- Enhancing Instruction with Mobile Devices
- QR Codes for the Classroom

#### **Other Software**

- Book Creator
- Buncee
- Classkick
- Creating Digital Assessments
- Digital Breakout EDU activities
- Ed Puzzle
- Flipgrid
- Flocabulary
- IXL
- Kahoot
- Kami
- Loom



- Nearpod
- Newsela
- Padlet
- Pear Deck
- Screencastify
- Seesaw
- Wakelet
- WeVideo
- Wixie









Many of the software companies that we have purchased from provide both synchronous and asynchronous training, which has occurred both in-person and virtually. These have occurred during Superintendent's Conference Days, Department Meetings, Grade Level Meetings and Team Meetings. Below is an abbreviated list of trainings.

- NWEA
- Gizmos
- Seesaw
- Think Central
- Nearpod
- Flocabulary
- Cengage/National Geographic Social Studies

















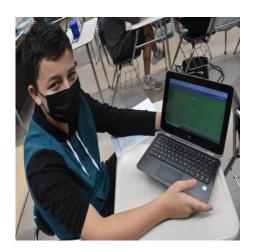


Students are first introduced to their laptop in Third Grade. Students are given training on how to logon, how to save files, how to use their OneDrive as well as navigating the internet using Microsoft Edge.

In Sixth Grade students are able to bring their devices home and receive additional training on laptop care, digital citizenship and how to effectively use their device as a learning tool.



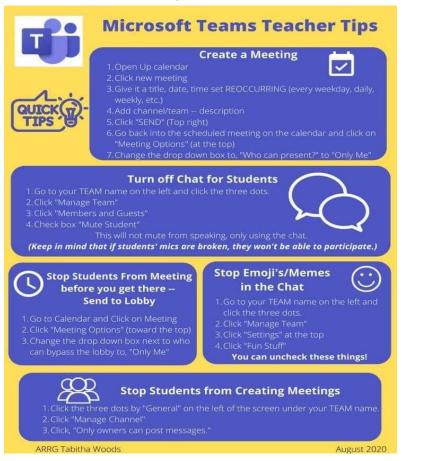


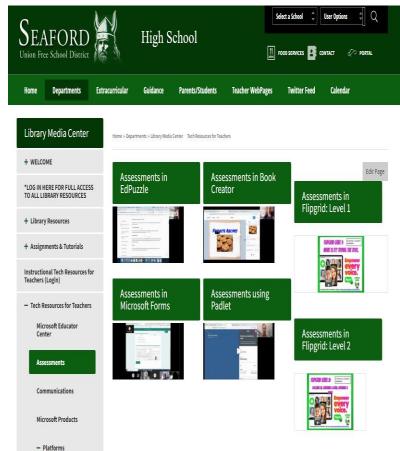






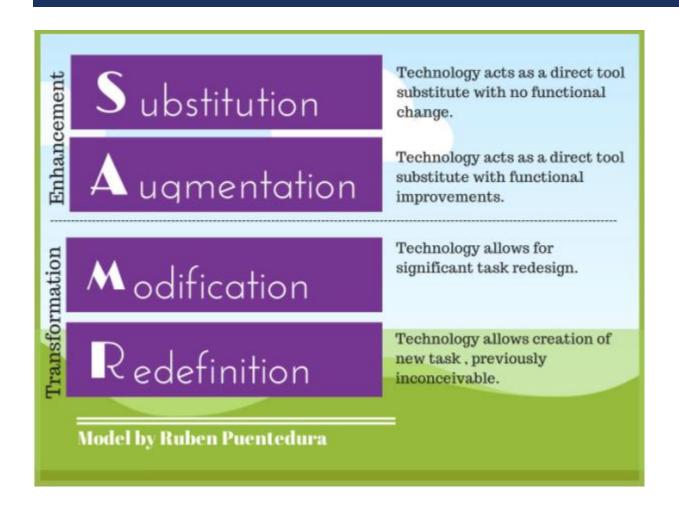
In addition to the training done in-person or virtually, there are many resources online on the Seaford District website for students, parents and staff to learn more about the available instructional technology resources.







#### INSTRUCTIONAL TECHNOLOGY – THE SAMR MODEL



The SAMR model identifies four levels of teaching and learning using a 1:1 device. It is a spectrum; at one end, the technology is used as a replacement for traditional tools (Substitution) and on the other end the technology enables experiences that were previously impossible without it (Redefinition).

In Seaford Schools, we have students engaged in all levels of the SAMR model.

### MICROSOFT TEAMS



Your teams



Period 1 Social Studies



Period 8 Social Studies



2022 Seaford HS Baseball Pre-Season



Period 6 Social Studies



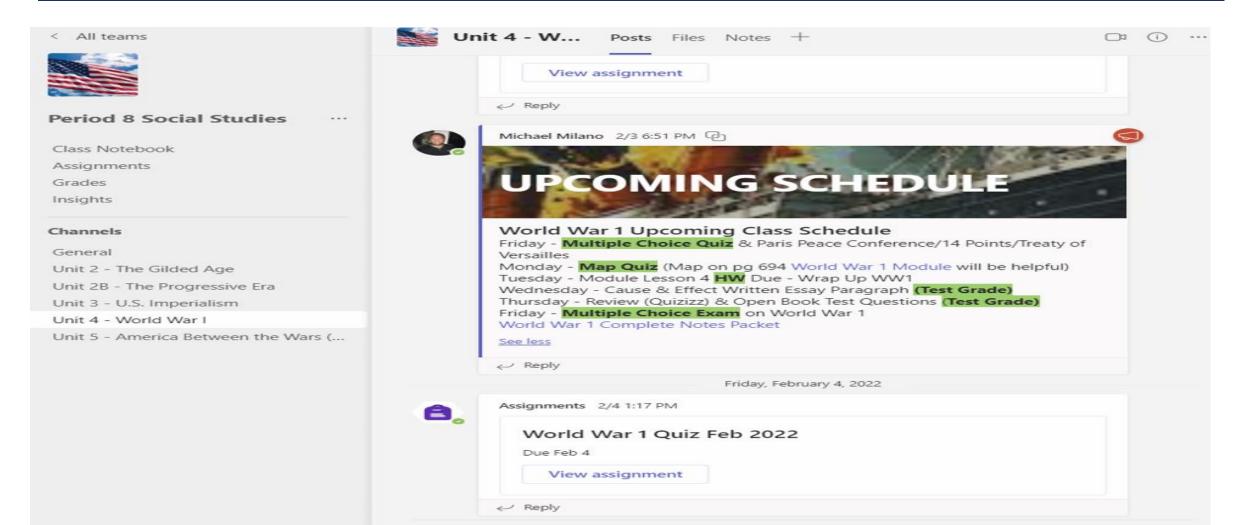
Period 4 Social Studies



Examining the Law







### MICROSOFT TEAMS



<b>&lt;</b> >		Q Search
Activity	- Map.pdf	
Chat		Name
(6)		Name
Teams  Assignments		Directions: Read th Then answer the q
Calendar		In 1919, a peace conference to for World War I was held at the Palac near Paris. President Wilson, headin egation, had a plan called the Fourth he hoped would restore stability to I
Calls		Of Wilson's points, eight dealt wi changes intended to allow Europear to decide their national identities. A called for the formation of a League oversee world peace. However, Wilson's idealism collic
		and foar. The French premiere had two German invasions of his country determined to prevent that from ha The British prime minister had just
		Europe Before World War I
		DENMANK DENMAN
		PRANCE SWITZERLAND SERBI

#### PLICATION: REGION A New Look for Europe

e paragraphs below and study the maps carefully. sestions that follow.

nally end e of Versailles g the U.S. delen Points that Europe.

th boundary ethnic groups nother point of Nations to

ed with hatred ived through and he was pening again. von reelection

with the slogan "Make Germany Pay." Also, contrary to custom, the conference did not include officials of the defeated countries, and Russia and the smaller Allied nations were excluded.

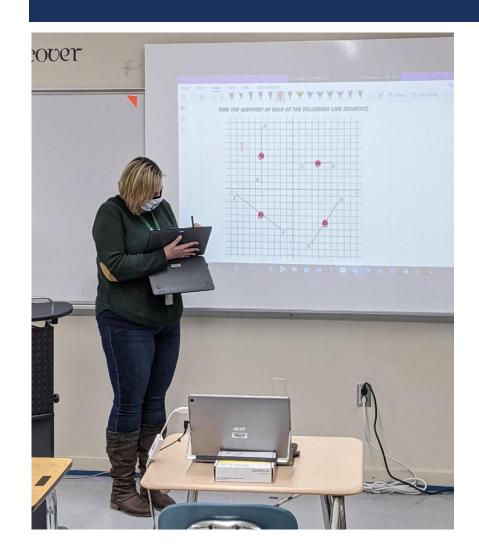
The Treaty of Versailles created nine new nations and changed the boundaries of others. (Shortly thereafter, in 1922-1923, the Soviet Union and Turkey came into being.) But the treaty failed to establish a lasting peace. The U.S. Senate even refused to sign the treaty because of fears that membership in the League would drag the United States into future European squabbles. Many historians blame the flawed treaty for encouraging the conflicts and resentments that surfaced in the 1930s and led to World War II.





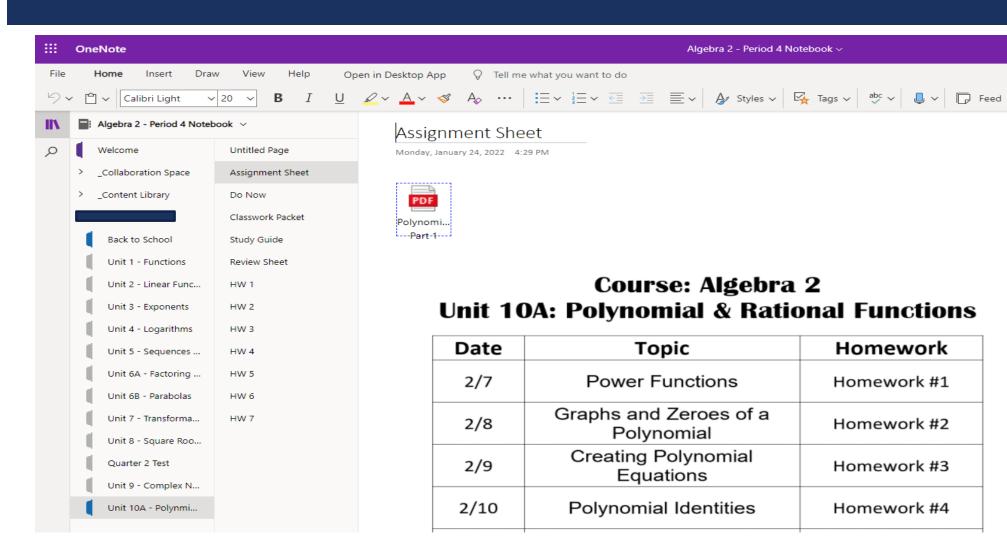
# MICROSOFT ONENOTE







#### MICROSOFT ONENOTE



#### MICROSOFT ONENOTE



Exercise #4: Simplify each of the following rational expressions.

(a) 
$$\frac{x^2 + 5x - 14}{x^2 - 4}$$
 DOTS

(b) 
$$\frac{4x^2-1}{10x-5}$$
 GeV

(c) 
$$\frac{3x^2 + 14x + 8}{x^2 - 16}$$
  $3x^2 + 14x + 8$ 

A special type of simplifying occurs whenever expressions of the form (x-y) and (y-x) are involved.

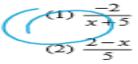
Exercise #5: Simplify each of the following fractions.

(a) 
$$\frac{9-6}{6-9}$$
  $\frac{3}{3} = -1$ 

(b) 
$$\frac{15-3}{3-15}$$
  $\frac{12}{-2}$   $-1$ 

(c) 
$$\frac{a-b}{b-a} = -1$$

Exercise #6: Which of the following is equivalent to  $\frac{2x-10}{25-x^2}$ ?



(3) 
$$\frac{x+5}{2}$$

(4) 
$$\frac{2}{x-5}$$

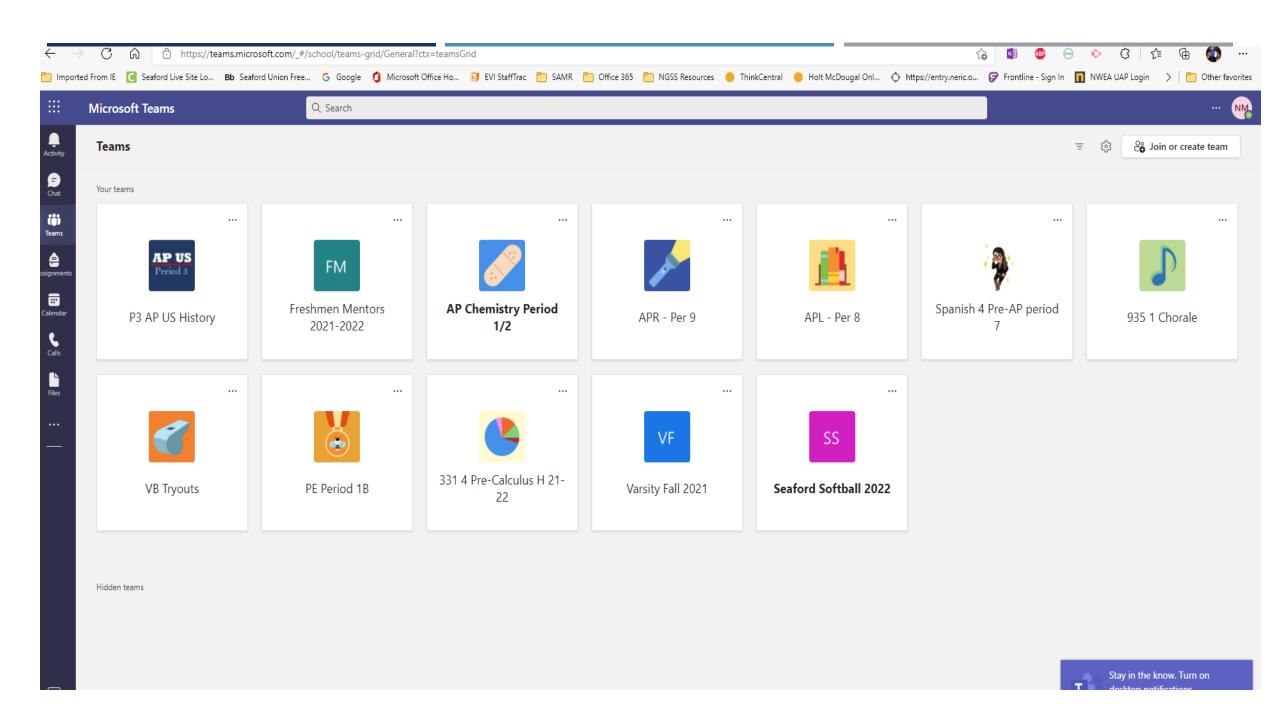
Exercise #7: Which of the following is equivalent to  $\frac{x^2 - 6x + 9}{18 - 6x}$ ? (X-3)(X+3) 6(3-X)

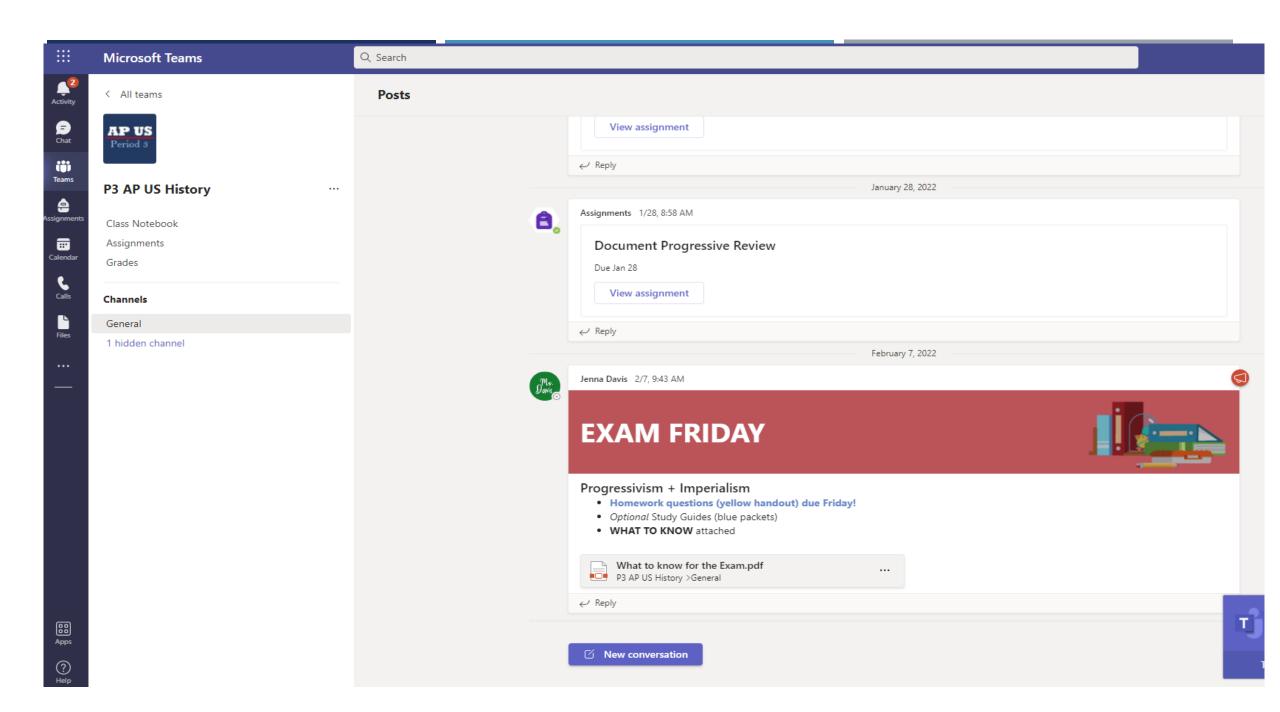
(1) 
$$\frac{-x-3}{6}$$

(3) 
$$\frac{x+3}{9}$$

(2) 
$$\frac{x-3}{6}$$

$$(4)\frac{3-x}{6}$$





< All teams



#### P3 AP US History

Class Notebook

Assignments

Grades

#### Channels

General

1 hidden channel



#### Assignments

< Back

#### Causes of the Revolution

Due September 20, 2021 11:59 PM

Instructions

Use the "sources" handout to help you answer the questions.

Reference materials



4 Critical Thinking Origin of the American Revolution Sources.pdf

•••

•••

My work



#### HW Causes of the Revolution.docx

Working on opening in edit mode... Please refresh and try again.



Feedback good job!

Points 12 / 12

### SEESAW: MULTI-FACETED TOOL FOR K - 2

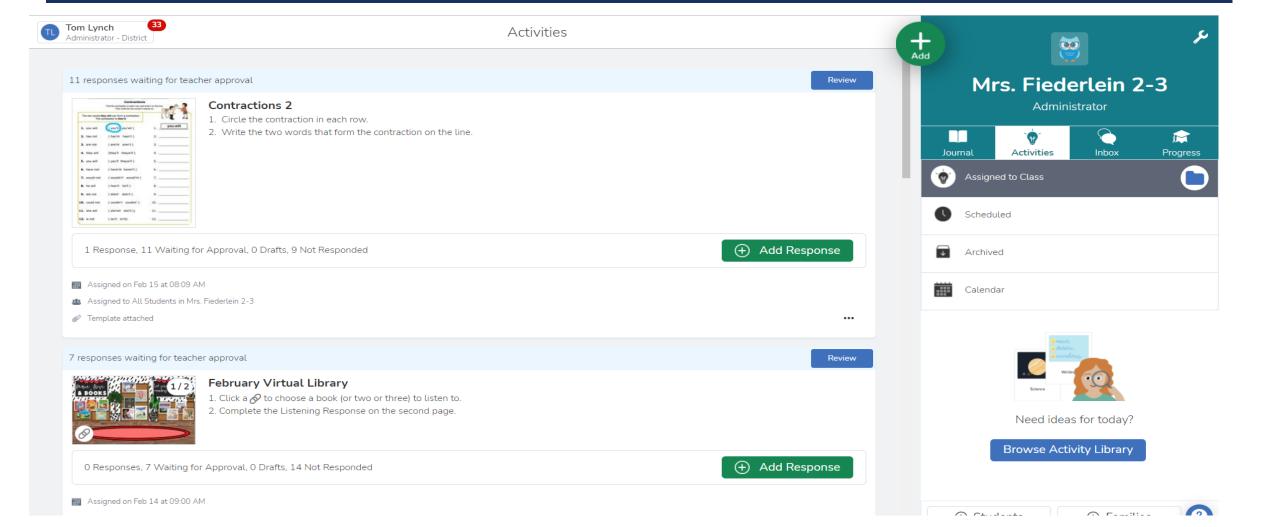
### Seesaw







#### SEESAW: MULTI-FACETED TOOL FOR K - 2



#### SEESAW: MULTI-FACETED TOOL FOR K - 2

1 Response, 11 Waiting for Approval, 0 Drafts, 9 Not Responded

- Assigned on Feb 15 at 08:09 AM
- Assigned to All Students in Mrs. Fiederlein 2-3
- Template attached



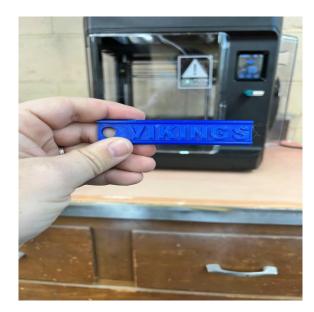
#### REVITALIZING TRADITIONAL TECHNOLOGY AND ART

Students can now use advanced software and machinery to create items in virtual space (Computer Aided Design) and produce them either on a 3-D printer or a computer-controlled machine.

3-D Printing at MS











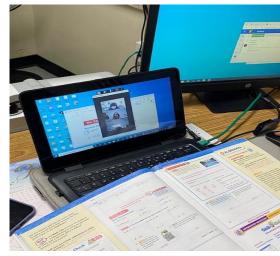
# SUCCESSFULLY LIVESTREAMED CLASSES IN ALL SCHOOLS AND SET UP REMOTE EDUCATION













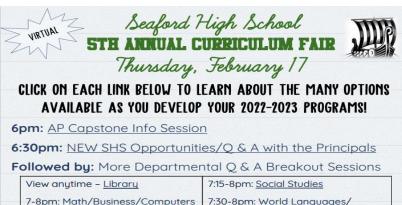


# SUCCESSFULLY LIVESTREAMED SPORTING EVENTS, CONCERTS, INFORMATIONAL SESSIONS, BACK TO SCHOOL NIGHTS AND BOE MEETINGS



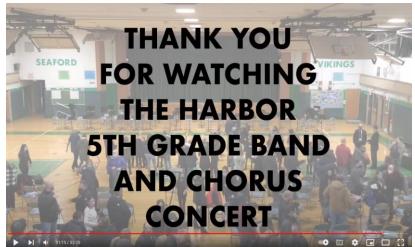






7:15-7:45pm: Art

NYS Seal of Biliteracy Password: Z50qKq





### WHAT IS NEXT FOR SEAFORD SCHOOLS?















#### THE TECHNOLOGY STEERING COMMITTEE

The Technology Steering Committee is made up of teachers and administrators from across the District and is essential in planning our next steps. The committee is focused on the following three areas: Software, Devices and Support. A survey was developed to gather information from the staff about these topics and the data will be used in future decision making.

#### One of the questions from the survey









#### EXPANDING THE USE OF TECHNOLOGY

Osmo merges tactile exploration with technology which provides an additional aspect of iPad use for students in the K – 2 program. Core learning skills from math to reading are enhanced with this engaging product.









#### EXPANDING THE USE OF TECHNOLOGY

The laser engraver will allow students to take an idea visualized in CAD and create a finished project in wood.











#### EXPANDING THE USE OF TECHNOLOGY







Students will use high-end computers with advanced graphic cards to edit digital photos to create new works using Photoshop, Illustrator, InDesign, Premiere Pro, After Effects, Lightroom, Acrobat, and XD.



## **∢envisioneer**™

With Envisioneer, students focus on design and construction ideas rather than learning complicated CAD programming. Students can focus on being creative while applying sound building and design principles to projects.

