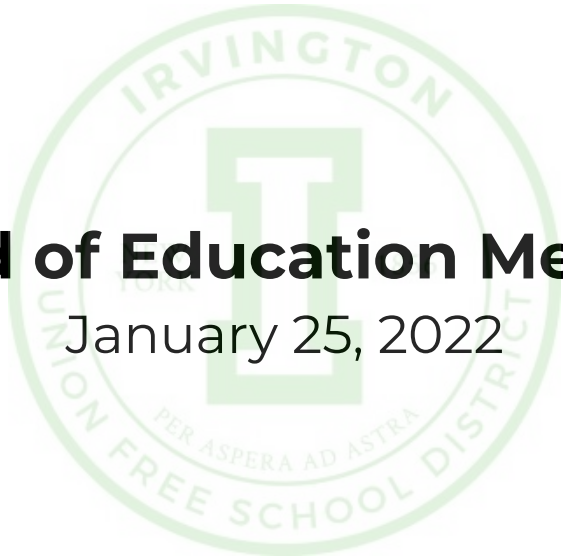


# 2022 Update: Technology In Irvington

## **Board of Education Meeting**

January 25, 2022



Technology  
is just a tool.

In terms of getting the kids  
working together &  
motivating them,  
the **teacher** is the most important.

-Bill Gates

# Guiding Questions

- 1.) What themes emerged as a result of the 1:1 expansion at IHS?
- 2.) What adjustments have been made to respond to feedback from stakeholders?
- 3.) What additional considerations were taken into account when planning for the 2022-23 school year?

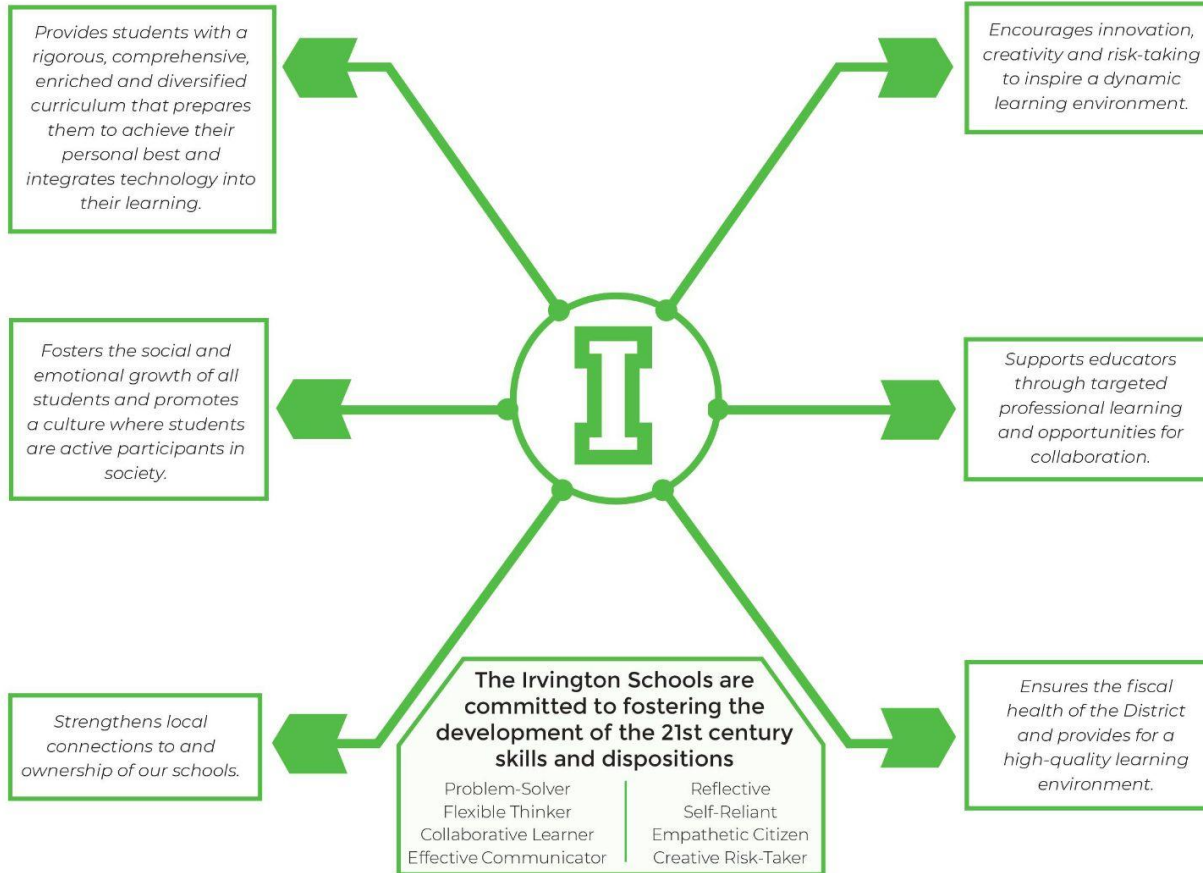


# Mission

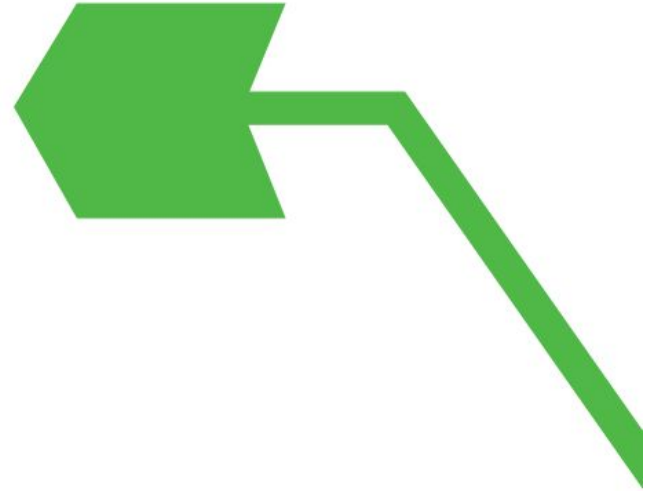
The mission of the Irvington Union Free School District is to create a challenging and supportive learning environment in which each student attains his or her highest potential for academic achievement, critical thinking and lifelong learning. Our schools encourage the discovery and development of students' individual strengths, skills and talents, and foster social and civic responsibility.



The **Irvington Strategic Objectives** serve as a foundation for all aspects of District and Board of Education work. Critical decision making such as budgeting, program development and facility enhancement is aligned with the District Mission and Strategic Objectives. To achieve its mission and vision, and to provide for the future of its students, the Irvington Union Free School District:



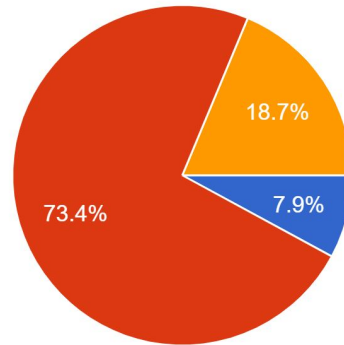
*Provides students with a rigorous, comprehensive, enriched and diversified curriculum that prepares them to achieve their personal best and integrates technology into their learning.*



# Feedback

Feedback was collected in various ways, including classroom visits, focus groups with student council members, as well as using a Google survey administered to parents, students, and teachers in Irvington High School. The survey yielded 620 responses broken down as follows:

620 responses



I am a...

- Teacher
- Student
- Parent/Guardian



# Feedback - Student Focus Groups

In October 2021 and then again in January 2022, HS administrators as well as Dr. Duffy and Mr. Strumwasser met with student council leaders in 9th and 10th grade to hear feedback about the 1:1 device rollout at IHS. Both warm and cool feedback was shared including the themes below with direct quotes from student participants:

## Warm Feedback

- Access to devices is a great thing to have.
- We are lucky to have the ability to get a device
- Charging Stations are helpful
- Student helpdesk is really helpful to have
- No real difference between personal chromebooks and school-owned chromebooks
- Tech is the way of the future
- Content filters are necessary

## Cool Feedback

- “Too many blocks on the computer”
- Difficulty connecting to Wi-Fi (password issues/speed issues)
- “Many” want to use their personal device
- Not using them at home
- Chargers left in bags
- Cases are bulky, can they be improved?
- Room to improve on the entire process, including the rollout

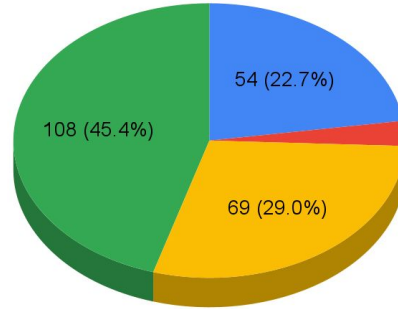




# Survey Feedback- Students

9th Grade Students: What best describes your experience so far around the use of Chromebooks in your classes?

- The chromebook does not meet my learning needs
- I am not using a District Chromebook for my learning at this time
- The chromebook meets my learning needs
- The chromebook meets some of my learning needs



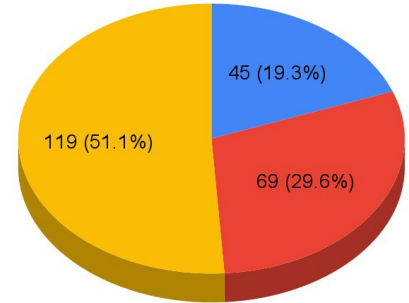
92% of all 9th graders responded

## Warm Feedback

- It helps me do my work
- Enhances my learning
- Works better this year vs. last

10th Grade Students: What best describes your experience so far around the use of Chromebooks in your classes?

- The chromebook does not meet my learning needs
- The chromebook meets my learning needs
- The chromebook meets some of my learning needs



91% of all 10th graders responded

## Cool Feedback

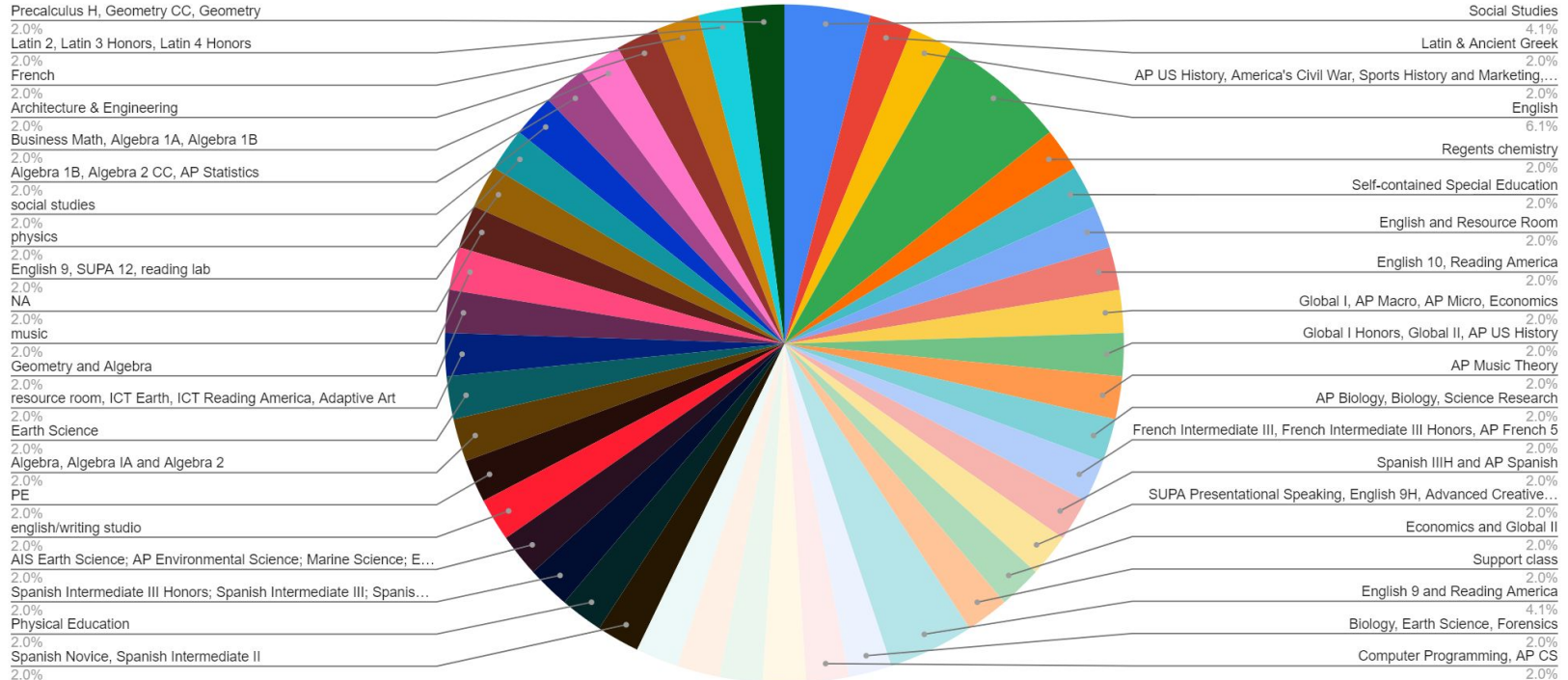
- 18% of students mentioned devices were slow
- Internet filter limits access
- Prefer my own device

Note: According to the White House Bureau of Consumer Affairs, a dissatisfied person will tell 9-15 people about their feelings.

# Feedback - Teachers

The survey yielded 49 teachers who represented the following subjects:

What courses do you teach?



80% of teachers responded

# Feedback - Teachers

## Warm Feedback

- Access to devices increases educational opportunities
  - Assessment
- Increased usage of technology since having them
- More digital options
- Critical part of their instructional procedure
- Students can learn at their own pace

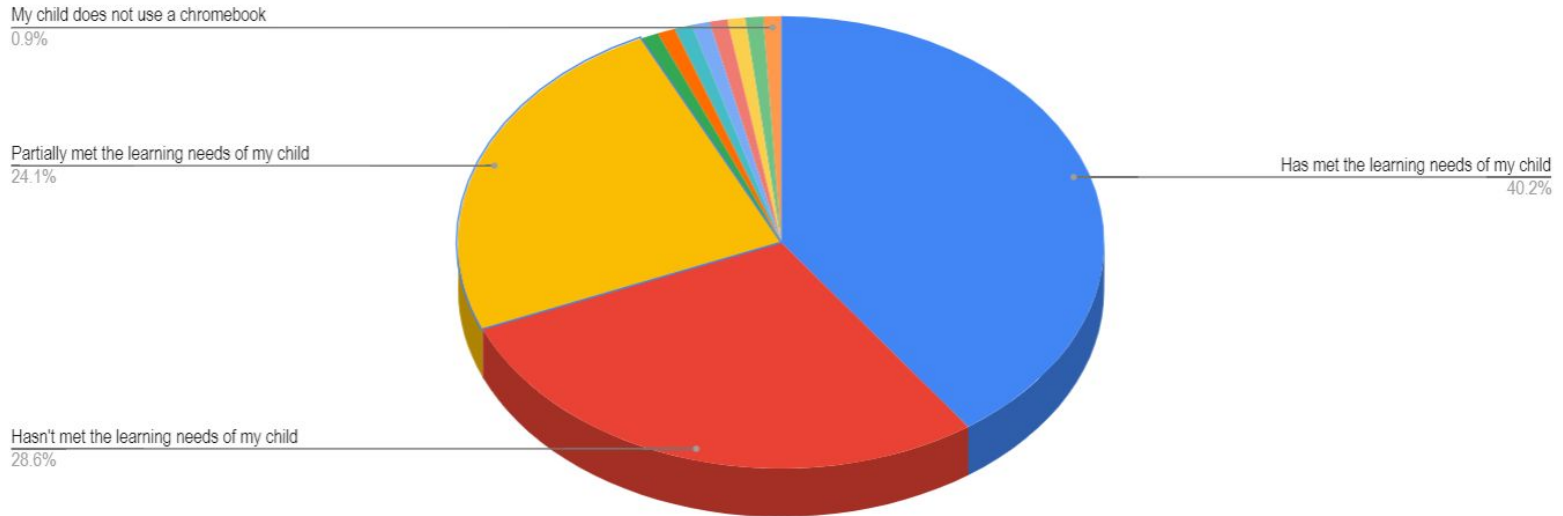
## Cool Feedback

- Desire for touch
- Wi-Fi issues linked to access/passwords/slowness
- “We do not use technology”/”We don’t want them”
- Students can get off task

# Feedback - Parents

Parent survey yielded 116 results that indicated the following:

How has the learning experience been for your child in the 2021-22 school year with the support of Chromebooks?



18% of all parents responded



# Feedback - Parents

## Warm Feedback

- The 76 parents (66%) that responded either “it partially met” or “met their needs”, did not provide any further information as to why they felt that way.

## Cool Feedback

- Frustrated by the requirement
- Prefers Own device
- Does not use it at home
- Small, no touch functionality



*Note: According to the White House Bureau of Consumer Affairs, a dissatisfied person will tell 9-15 people about their feelings.*

# Our Immediate Response to Feedback

- We installed charging stations and added back charging buckets in classrooms with surge protectors.
- Filtering settings are constantly being adjusted to allow for increased access, still being aware of safety as the primary focus.
- A student flyer was sent out to assist students with frequently asked questions and access to our student helpdesk.
- We began an exploration of new models of chromebooks, asking local districts what devices worked best for them.
- Increased opportunities for ongoing professional learning for teachers - the Instructional Support team introduced “Techy Tuesdays” in response to our needs assessment.
  - Sessions are recorded to help with continuity of learning, for those who may not be able to attend.



# Curriculum-based Experiences and Our 1:1 Expansion

## English/ENL:

- Collaborating on group work more efficiently such as annotations of text. Also “Improved rate of submission of assignments” and ability to provide feedback. Workflow is improved for teachers (sharing and collecting assignments and providing feedback).

## Math/Technology:

- Access to resources using their 1:1 devices: class notes, Smart Notebook notes, materials, lessons, activities, homework answers and more.

## Science:

- Ability to collaborate in the collection of data during labs and the use of simulation programs such as Gizmos. Also, assessments using locked Google forms - “I like that the students can't access other tabs while taking a google forms quiz.”

## Social Studies:

- Students can answer questions and see results and receive feedback in real-time - surveys, polls and Castle Learning. Paperless model, “Paper savings alone is tremendous.”



# Curriculum-based Experiences and our 1:1 Expansion

## World Language:

- Formative Assessment- “This has provided many opportunities for formative assessment and checking for understanding.” Use of Pear Deck to interact with Google slides has allowed for greater ease in assessing speaking because students can take out their devices and record/upload a video submission directly to Classroom.

## Special Education/VIP:

- All students have equal access to materials they can manipulate for themselves and have access to at all times. One location to store files necessary for class instruction.
- Students in VIP complete Google Forms associated with lessons and their incredible work at the O’Hara Nature Center this year, they are learning to use email, access IXL and more!

## Music:

- Students can use MusicFirst to sight read, compose, and complete exercises.

## Art:

- Can aid in research to review examples of art and techniques.

## PE/Health:

- Webquest and research related to nutrition and current events.





# Highlights of Practical Uses of Technology in a 1:1 Setting

## Practical uses of technology with assessment:

- Students are able to complete “do nows,” open notes quizzes, (using Google forms) at the beginning of class on a regular basis. Quizzes provide feedback for teacher.
- Students use Pear Deck to pace themselves in the lesson.
- Students use Padlet to explain their answers and reasoning.
- Students can type individual responses to questions and formal lab reports.
- Independent learning activities/small groups via breakouts while maintaining distance and safety.
- “Being able to work collaboratively with my ENL students on a document allows us to exchange ideas and helps to improve skills from home and at school.”
- Students can use MusicFirst to sight read, compose, and complete exercises.
- Students can use Gizmos to perform lab experiments in a virtual environment, when in-person opportunities were limited.



# Limitations/Responses in a 1:1 Environment

Limitation posed	Reaction/Response to this limitation
Unable to use Chromebooks in subjects: Photography (Photoshop) Science (Physics Probes)/PLTW	<ul style="list-style-type: none"><li>● Imac Lab was upgraded in summer 2021</li><li>● Laptops were purchased in summer 2021 for new physics probe programming and PLTW.</li></ul>
Charging concerns	<ul style="list-style-type: none"><li>● Loaner system was created by HS Administration</li><li>● Charging stations were installed in high traffic locations and in classrooms, buckets were added with surge protectors</li></ul>
Ability to write on a chromebook	<ul style="list-style-type: none"><li>● Using Kami, we were able to offer a way to digitally annotate a document.</li><li>● Future plans include purchasing touch-screen devices</li></ul>
Project Lead the Way, Photography	<ul style="list-style-type: none"><li>● Using Cameyo (virtualization software), we were able to provide a slightly limited version of the software needed to meet this need on chromebooks/personal devices.</li></ul>
Unable to monitor what students are doing on devices	<ul style="list-style-type: none"><li>● We can explore a screen monitoring tool, such as Lightspeed Classroom, and pilot the experience with teachers interested, before deciding what to do at a whole district/school level.</li></ul>
Internet connectivity and speed	<ul style="list-style-type: none"><li>● IT staff have done speed testing in classrooms and have made adjustments to the network.</li></ul>
Blocked websites	<ul style="list-style-type: none"><li>● IT staff have been using helpdesk requests to monitor blocked site requests.</li><li>● PD has been ongoing with teachers to allow time for sites to be checked by IT staff for privacy and security compliance.</li></ul>

# Budgetary Impact

In 2021, no new chromebooks were purchased, as recent model chromebooks were still available from 2020-21. These devices were distributed as follows:

- 9th and 10th grade students each received a chromebook as part of the 1:1 program in September.
- 70 11th and 12th graders borrowed a device since the beginning of the 2021-22 school year.
- 6th graders in IMS were outfitted with the same new model in September.
  - This model will loop up with students until 9th grade

ECF - In 2022, Irvington was approved for the Emergency Connectivity Fund, which would offset the purchase of new chromebooks to meet the needs of students in IHS.



# Budgetary Impact

If we were to purchase laptops, we would have to factor in:

- Increased support costs (addition of at least one IT staff member for break/fix and management of device policies)
- Device policy/permissions management solutions
- Increased license costs for on-board software like Microsoft, Adobe, and security software.
- Increased vulnerability to malicious software
  - Purchase additional licenses for antivirus software to protect the core network
- Increase Wi-Fi saturation as devices will be used in higher capacities, leading to increased bandwidth needs



# Budgetary Impact

	<b>Chromebooks (keeping to the original plan)</b>	<b>Laptops</b>
Device, License, Insurance Costs	\$400 with device, license, and accidental warranty insurance	\$1000 with device, license, and accidental warranty insurance
Human Resources	No additional increase of IT staffing, but proposed support for additional computer aide and technology coach	Addition of at least one IT staff member to deal with break/fix, device and group permissions. (\$100,000)
Security Costs	No additional virus software needed, since chromebooks are limited to impact by viruses.	Average cost of \$35/device for endpoint protection.
Software Costs	No additional software can be added to a chromebook, rather subscription services take its place (no added costs)	Operating system, on-board licenses (Microsoft, Adobe, etc.) - \$100

# Training and Technical Support- Responding to feedback

In September 2021, during the Superintendent's Conference Day, the Instructional Technology Support Team (Formerly Google PD Team), ran sessions to train teachers on ways to use chromebooks with various tools to utilize in in-person instruction.

In October, a needs assessment survey was conducted District-wide to ask teachers to identify the programs they wanted more training on.

In January, 2022, Techy Tuesdays was started, where members of the training team turnkeyed training from vendors they received as members of the team.

- Kami, Nearpod, Padlet, Classlink, Gimkit, Newline, Google Workspace, trainings will be lead by members of the IHS team



# Teacher Needs

We are exploring the opportunity to increase our professional development opportunities in the following possible ways:

- 1.) Hire an Instructional Technology coach/consultant to provide trainings to our teachers in a cohort model
  - a.) This has been an on-going budgetary request
- 2.) Increase the Instructional Technology Support Team and provide them with training from vendors to turnkey to their colleagues
- 3.) Offer more vendor-led training during PLRD time
- 4.) Subscribe to on-demand PD opportunities from our current vendors
  - a.) Newline University
  - b.) NewsELA PD Pass
  - c.) Otis for Educators by Lumio (formerly SMART)
- 5.) Offer mobile technology for teachers to increase access to technology resources



# Where are we in January 2022 - Infrastructure

All learners have access to technology in an anytime, anywhere, one-to-one computing environment as appropriate and relevant to instructional goals.

- Wi-Fi was upgraded District-wide to support increased connectivity across all campuses. Outdoor Wi-Fi is available, but has been problematic.
- All students and staff were provided with a device during the COVID-19 quarantine and the return to school, Fall 2020- June 2021.
- Devices were collected in the summer of 2021, and redistributed K-5 into charging stations, and 1:1 for grades 6-10, (11/12 as requested) in September 2021.
- Devices were given out for take-home in December 2021, K-12, as needed in preparation for possible remote instruction due to COVID-19.





# Our Proposal

In the 2022-23 school year, we will continue the chromebook 1:1 expansion to 11th grade, taking into account the following adjustments to the program:

- Filtering settings are being adjusted to allow for increased access, still being aware of safety as the primary focus
- Passwords will be reset in February to align passwords to BYOD (for personal devices)
- BYOD will continue to be available for 12th graders; all grades with teacher permission, and free time
- Device loaners will be available for quick swaps to allow for more seamless transitions and allow students to get back to classes in a timely manner
- The newest model of 1:1 devices identified will have:
  - Faster processor
  - Increased ram
  - Larger screen
  - Touchscreen as an option

(These were identified as biggest concerns with current devices)



Feedback	Our Response	Timeline
Devices are blocking educational materials	<ul style="list-style-type: none"> <li>- We will be investigating how to optimize our filter to allow for more educational materials, aligned to NYS Educational Law 2D Privacy Policies.</li> <li>- We will create a system for student requests to provide data for this new system.</li> </ul>	Winter 2022
Devices are slow, and are not touch screen	<ul style="list-style-type: none"> <li>- The new model we explored has touch functionality, larger screen, and faster processing.</li> </ul>	Fall 2022
More Training Needed	<ul style="list-style-type: none"> <li>- Using the needs assessment, we incorporated more ongoing professional learning opportunities.</li> </ul>	Winter 2022
Access to Wi-Fi/Password Issues	<ul style="list-style-type: none"> <li>- We will be resetting all users' passwords over the February break, with ample communication ahead of time.</li> </ul>	February 2022
Tech support needs	<ul style="list-style-type: none"> <li>- Recommending hiring of an Instructional Technology coach and additional computer aide</li> </ul>	September 2022

# Technology Steering Committee

Established in 2021, in order to help to create a new vision of technology in Irvington

Committee Purpose: To review and update the 2022-2025 NYS Technology Plan as it relates to the integration of instructional technology in the Irvington Union Free School District.

The committee is comprised of staff from all 4 buildings, administrators, and a parent representative.

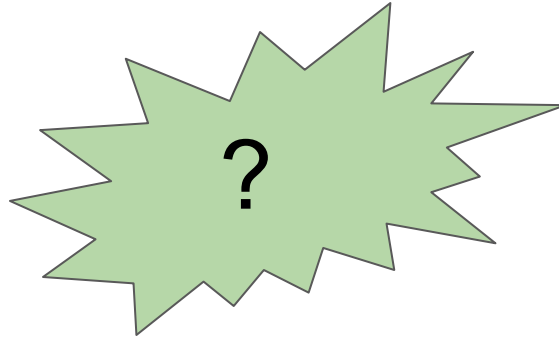
The committee will meet 4 times this year to discuss our current technology plan and answer the following guiding questions:

- 1.) What is most timely/relevant to keep as a goal for the new technology plan?
- 2.) What is considered redundant, and can be removed or combined?
- 3.) What is something new that you would like to see added as a possible goal?

This body will develop strategies, and plans for future enhancements in the technology space in Irvington UFSD.



## 2022 Update: Technology In Irvington



Board of Education Meeting  
January 25, 2022