



Safe Technology and Digital Citizenship ~ Summary ~

*created 10-29-2020

Panorama Elementary is committed to keeping all students safe while working online. This is a summary of a much larger and detailed document that can be found at the following locations:

District's Website with information: <https://www.washk12.org/tech/be-safe>

School's website with information: <https://pes.washk12.org/be-safe/>
(School Website, Technology Tab, Be Safe)

*Watch our social media platforms and your email for "**Tech Tip Tuesday**". We will be reviewing something about internet safety each week.

WCSD uses iBoss Cybersecurity's Secure Web Gateway product to prevent access to unauthorized and harmful content on the web. WCSD currently uses multiple iBoss appliances that filter the outbound traffic leaving the school district's network. The appliances filter over 7Gbit/sec of internet bound traffic on the average school day. The requirements on our network for increased bandwidth grows every year. WCSD takes the security and protection of our students very seriously, and blocks thousands of websites that host pornographic and other harmful material. The District utilizes Impero and Google Chromebook Management to manage devices and control access to the Internet.

70/30 RULE OF INTERNET CONTENT FILTERING

The 70/30 Rule of Internet Content Filtering states that students are simply not safe online when only technology measures are used to prevent access to harmful content. This is due to the technical limitations of filtering. As the demand for more security and privacy on the Internet increases, the natural effect of the resulting technological changes directly impairs our ability to filter. The rule of thumb is that 70% of internet content filtering is supervision based, and 30% is technology based. By adhering to the 70/30 rule of internet content filtering, the likelihood that a student will be exposed to harmful content is severely reduced. The concept is simplified and explained in this video: <https://youtu.be/d3MZKJOzc3M>. Panorama Elementary teachers and staff monitor students when they are online. Students are seated at their desk/table where the screen is highly visible to anybody around, and the teachers monitor around the classroom.

Panorama Elementary classrooms are equipped with projectors and Elmos, document cameras. Some classrooms also have SmartBoards, iPads, and chromebooks. The goal of Panorama Elementary is to be 1:1 devices in upper-grades, and a minimum of 2:1 devices in lower-grades. These devices will be purchased through various accounts: Title I, Teacher & Student Success Account (TSSA), Community Council Trust Lands, and our regular school technology account.

Panorama Elementary has developed a Response to Intervention Plan that identifies the process by which we will handle incidents where students use technology inappropriately. The plans are intended to educate students and give them a chance to change behavior. Students that have used devices inappropriately will meet with parents and administration to develop a **Student Internet & Technology Plan**.



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• What filters are being used and how do they work?

Washington County School District currently uses iBoss Cybersecurity's Secure Web Gateway product to prevent access to unauthorized and harmful content on the web. The iBoss solution was selected from a state wide RFP administered by UETN (Formally UEN). The solution's subscription is paid state wide by funds administered by UETN. Districts are responsible only for the costs of the appliances.

WCSD currently uses multiple iBoss appliances that filter the outbound traffic leaving the school district's network. The appliances filter over 7Gbit/sec of internet bound traffic on the average school day. Due to WCSD's continued commitment of the use of technology in the classroom, the requirements on our network for increased bandwidth grows every year.

WCSD takes the security and protection of our students very seriously, and blocks thousands of websites that host pornographic and other harmful material. The iBoss filtering solution sits on the network, in-line with the District's outbound internet connection. It actively scans all traffic as it passes across the network, and constantly looks for traffic that is undesirable. When that traffic is detected, it immediately blocks that traffic from passing across the network.

In addition, WCSD utilizes 25 dedicated iBoss Cloud appliances to provide filtering for Chromebooks. This is done by tunneling all internet traffic for each Chromebook through one of the cloud appliances. When the traffic passes through each appliance it is filtered using the same criteria mentioned above. This allows WCSD Chromebooks to be filtered offsite, and support virtual and at home learning with approved programs.

• Are there different settings used for different grades and school levels?

Since every teacher and school uses available resources on the internet differently, we have deployed tools within the schools to give the schools greater control of available resources as they deem fit for the students within their school.

• What is the district filtering policy on frequently used sites such as YouTube, Google Images, Weebly, and etc.?

Because most internet search engines and other online media utilize encryption, WCSD's filters are unable to view and filter searches on those sites. Because of this, WCSD takes advantage of any services that offered by the individual sites. For example, WCSD uses Google's Enforced Safe

Search, YouTube for Schools, and Microsoft's Bing in the Classroom. These services, albeit fully encrypted give WCSD some ability to control the content that is delivered through them. Google's Enforced Safe Search and Microsoft's Bing in the Classroom give WCSD the ability to toggle a Safe Search flag. In that particular case, WCSD is unable to determine what content is appropriate, and has to rely fully on Google and Microsoft to make those determinations. Youtube for Schools allows us some additional controls, in which we can add to the acceptable list, but the default list is not modifiable by WCSD. Because these services use TLS Encryption and the Google Chromebooks and other Chrome browsers are Pinned to Google's master certificate, we are unable to provide any more extensive filtering than what is provided through these methods.

WCSD is unable to provide any safe access whatsoever on other encrypted search engines. For this reason, WCSD blocks Yahoo.com, Ask.com, Aol.com, DuckDuckGo.com and other search engines that utilize encryption but do not offer controls to provide some level of safety for our students.

70/30 RULE OF INTERNET CONTENT FILTERING

Washington County School District has adopted the 70/30 Rule of Internet Content Filtering. A concept originally developed by Jeremy Cox and presented at the 2015 SAINTCON (<https://saintcon.org>) Conference (<https://youtu.be/32wsQ5VXwWo>) by the UtahSAINT Organization (<https://utahsaint.org>).

The 70/30 Rule of Internet Content Filtering states that students are simply not safe online when only technology measures are used to prevent access to harmful content. This is due to the technical limitations of filtering. As the demand for more security and privacy on the Internet increases, the natural effect of the resulting technological changes directly impairs our ability to filter. The rule of thumb is that 70% of internet content filtering is supervision based, and 30% is technology based. By adhering to the 70/30 rule of internet content filtering the likelihood that a student will be exposed to harmful content is severely reduced.

The concept is simplified and explained in this video: <https://youtu.be/d3MZKJOzc3M>

In order to provide a safe learning environment, WCSD provides supervision for Students when using district devices in the classroom, but must rely on parents to provide supervision for students when outside the classroom.

• Are there management systems available (MDM, Chrome management, LanSchool, and etc.) that can add additional control and who accesses those systems?

The District utilizes Impero, Google Chromebook Management, and Lightspeed to manage devices and control their access to the Internet. Impero provides granular local control of internet access on devices and allows teachers and local administration to monitor use in real time and review incidents of students attempting to access inappropriate content. In addition, WCSD uses Bark to monitor student's communication online through the District's G Suite system used for Google E-Mail, Google Hangouts, and Google Drive to identify additional issues.

• What resources does the district provide concerning educating students on safe internet use and digital citizenship?

These principles are instilled in our children starting at an early age in our elementary labs, where lab aides teach internet safety, privacy and security to all elementary students each year. Students continue through their internet safety education all the way into the graduation required Computer Technology course taught in our secondary schools. We know that teaching kids to use the internet appropriately and responsibly is a critical skill that they will need for the rest of their life. Many resources to help teach these concepts can be found at <http://www.netsafeutah.org/> We also provide extensive educational materials to teachers to be used throughout K-12 that educate students on digital citizenship. We encourage teachers to integrate these digital citizenship lessons into their regular routine as they use technology in the classroom.

In addition, many of our schools also take advantage of White Ribbon Week and other digital citizenship programs.

Washington County School District acknowledges that technology based filters are not always effective at eliminating harmful content and due to this, Washington County School District uses a combination of technological means and supervisory means to protect students from harmful online content. To that end, Washington County School District has adopted the 70/30 Rule of Internet Content Filtering.

• What is the protocol in district schools when inappropriate content is accessed for students, employees and parents?

Each school has been encouraged to develop a Response to Intervention Plan, that identifies the process by which they handle incidents where students use technology inappropriately. The plan creates standards for handling these issues and helps the school provide remediation for the student in a fair and consistent way. Plans are intended to educate students, give them a chance to change and to escalate as incidents become more severe or repetitive.

Panorama Elementary Specific Information

• What devices are being used and how are classes using them?

***SmartBoards**

Teachers with SmartBoards use their board on a consistent/daily basis for curriculum and student interaction. There are currently 13 SmartBoards in use at the school from Kindergarten through 5th grade. SmartBoards are also interactive, allowing students the opportunity to use them.

***Elmo Display Projectors**

Primarily used in lower grades; teachers are able to project what they are doing up on the SmartBoard/whiteboard so ALL students can see. Teachers also use this device to show papers they are working on, or books they are reading. There are currently 20 Elmos in use at the school, one in every classroom from Kindergarten through 5th grade.

***Projectors**

Every classroom has a projector mounted to the ceiling. This allows teachers to project their computer or Elmo screen to the front SmartBoard or whiteboard. These are primarily used for direct, Tier 1 instruction.

***Chromebooks**

The goal for Panorama Elementary is for students to be 1:1 devices in 3rd, 4th, and 5th grades, with a minimum of 2:1 devices in Kindergarten, 1st, and 2nd grades. There is a 6 year rotation plan to purchase these devices and maintain them throughout the years:

2020-2021: New chromebook class sets for 4th grade students

2021-2022: New chromebook class sets for 5th grade students

2022-2023: New chromebook class sets for 3rd grade students

2023-2024: New chromebook class sets for Kindergarten and 2nd grade students (2:1 ratio)

2024-2025: New chromebook class sets for 1st grade students (2:1 ratio); more 1st grade teachers than any other grade

Current chromebooks being used:

Checked out for virtual learning: 8

Kindergarten: 0

1st Grade: 0

2nd Grade: 2 class sets (3 total teachers; they share chromebooks as needed)

3rd Grade: 3 classroom sets (one for every teacher)

4th Grade: 3 classroom sets (one for every teacher)

5th Grade: 3 classroom sets (one for every teacher)

Due to the COVID crisis, the 4th grade chromebooks ordered in July have still not arrived. Once they arrive, any chromebooks still in working condition will be handed down to our 1st grade teachers.

Chromebooks in grades 3rd, 4th, and 5th are primarily used for Lexia, Redbird, center work, writing/typing, Reach for Reading, iReady, Utah Compose, Schoology, and RISE testing modules and end-of-year testing. Some teachers have also purchased Spelling City that is accessed on chromebooks.

In addition to the above mentioned devices, the grade levels also have other devices as listed below:

Kindergarten: Kindergarten has a mixture of old and new iPads. Each teacher has 6 new iPads that are working great. The school has decided to not replace iPads at this time. We will begin to move into chromebook purchasing instead. Teachers use the iPads for Lexia, Letter School, Sight Word Ninja, Listen & Learn, and OSOs. These are primarily used during center/rotation time.

1st Grade: Each classroom has 6 iPads, used for Lexia.

2nd Grade: There are a few iPads used for software (Lexia & Redbird)

Life Skills SPED: Students are able to access iPads for extra skill practice. The Life Skills classroom also has a SmartBoard that is used interactively with students for brain breaks, Math and Reading songs and practice, and story reading.

• What are the main applications, programs, and sites used in different classes, grade levels, and subject areas?

*Preschool students utilize the online Upstart program at home.

*Kindergarten through 5th grades have access to **Schoology** online. Teachers are pushing more and more online, supporting students in the classroom and some are beginning to push work online from home. We will also begin having a "Virtual Hour" at school in order to help students feel more comfortable with online learning IN the event schools go into homebound learning again.

*Kindergarten through 5th grades also use **MyMath** (district math program) and **Reach for Reading** (district reading program) online resources.

*Kindergarten through 5th grades utilize **Move This World**, which provides social emotional learning (SEL) with the use of interactive videos, movement, and creative expression to help students, educators, and families develop emotional intelligence skills for long-term wellbeing. This is a district sponsored program.

*Kindergarten through 5th grades have access to **Google Docs**, but this is mostly used by 3rd, 4th, and 5th grade students.

*Kindergarten through 5th grades use **Lexia Reading** and **RedBird Math** to various degrees. Time spent in each program depends on the grade level. Lexia is a state sponsored reading program. RedBird is an optional program provided through the district.

3rd Grade: Xtramath, iReady, Kahoot!, Spelling City, Prodigy, Story Online, Unicef Kid Power-ups, authorized YouTube videos, Mystery Doug, UEN, Scholastic News, Epic Books. These sites cover all content areas: literacy, math, science, social studies, health and wellness.

4th Grade: typing.com, Typing Agent, Kahoot!, Epic Books, utahonlinelibrary.com, Google Sheets, Google Forms, Google Slides, BrainPop, Quizlet, Buzzmath, iRead, WebQR.com, Xtramath, Readworks, Flipgrid, and Breakout EDU

5th Grade: Students access Google Drive, Google Slides, Kahoot, Class Dojo, Prodigy, ABCYa, NitroType, Typing Agent, Utah Compose, and iReady.

• **What supervision practices are in place when students are online?**

As a school we follow the Washington County School District's 70/30 Rule of Internet Content Filtering. This states that we recognize the filters may only catch 30 percent of what's on the internet and 70 percent of monitoring comes from teacher monitoring in the classroom.

Bark (if we decide to use) is a district approved monitoring system. It sends an alert to the administrator if key words regarding sex, violence, and weapons are searched or typed on student accounts.

School-wide, teachers and staff monitor students when they are on any kind of devices. This is done by monitoring around a classroom, having students work where the screen is always visible, such as right on top of their desk or table. Timers are also used to help monitor amount of time on devices. Some timers are built-in specific programs, but teacher utilize timers classroom wide if not.

Other practices currently happening in various grade levels:

Kindergarten: Guided Access when working on devices; use of QR codes

1st Grade: Teachers inform students that the only sight used in 1st Grade is Lexia, to let teachers know if they see students not doing Lexia.

3rd Grade: Training in all classes about the appropriate use of technology; through the year, three week-long White Ribbon Week trainings to teach kids about safety and healthy use of internet and social media, (one per trimester). The first White Ribbon Week taught students to: Turn it off, Tell a trusted adult, and to Turn to something active if they run into something inappropriate. Expectations are set and taught explicitly, such as screens need to be visible to others. Teachers also encourage students to be aware of their neighbors to help keep them on task as well.

4th Grade: Weekly checks in to see their history

- **Are there management tools used that allow teachers to digitally monitor student use or limit access to some applications or sites?**

The firewalls we have are the initial safety tool that restricts and blocks websites and services that have no educational value to students. These firewalls are updated constantly to correct any issues that come.

iPads are configurable to allow the teachers to restrict different services on the device.

- **What are the school rules when inappropriate information appears for students, staff and parents? Are there safe reporting procedures for students, staff, and parents so that reporting is safe and encouraged, when it happens?**

There is a 'bullying' link on our school website where students can safely report anything they feel falls into the cyber-bullying. (All bullying can be reported there; answer specific to internet and online.)

Any violations are immediately reported to the principal. Any suspicion of inappropriate use may constitute the principal to contact the technology experts at the district. The principal handles each situation on an individual basis. The parent is always contacted and the principal holds a meeting with the parent(s) and student. Consequences *might include* limited use or forfeit of technology privileges and contacting the School Resource Officer.

***Attached to the end of this report is our School Internet Technology Plan.

- **How does the school balance access and safety appropriate for the grade levels at your school?**

Students are given explicit instructions as to how, when, and where to access content on the web. Teachers model explicitly what websites students are allowed to access. Teachers also ensure that Chromebooks and devices are used only at student desks or approved areas around the room, for specific purposes, and teachers constantly walk around and monitor student use.

Weekly PLC discussions allow for continual communication between administration and staff regarding policies, procedures, and content with respect to each grade level.

- **What does the administration see as important opportunities for our students related to constructive, proactive technology use?**

- Access to technology devices
- Quality instruction and training for proper technology usage
- Ongoing training for teachers, students, and parents
- Unique opportunities such as Hour of Code
- Real world research
- Instructional content
- Skills practice
- Keyboarding
- Word processing
- App usage
- Overall computer skills

- **What does the administration see as their greatest threats for your students?**

- Cyberbullying
- Accessing inappropriate content
- How students are using personal and/or school devices
- Inability to control the impact of mass media (social media, 24/7 news, fake news, etc.)

- **What are the policies in place for devices brought from home – tablets, cell phones, etc.?**

We do not currently allow any electronic devices from home to be used in the classroom. This includes no tablets, no cell phones, no Kindles, no iPads, etc. If students have these devices, they should be in their backpacks and not out during school time. If students bring their devices and something happens, the school does not spend time tracking down anything. Students bring their devices at their own risk. A half-page flyer is sent home in the folder at the beginning of the school year addressing Policy 3700 Technology Acceptable Use Policy which addresses this topic.

- **What does the administration see as the greatest threats for our students on the internet or online?**

Lack of Education: Students have a lack of education to protect themselves in the online world. We as the school can only do so much. Filters can only keep so much out of view. The most effective way to keep students safe online is not to trust a filter alone, but to be completely involved in a child's internet world, to keep technology devices in full view and not in secret, to explicitly teach a child what is appropriate and what is inappropriate and what to do if they come across something that makes them feel scared, threatened, uncomfortable, etc.

Supervision at Home: We have no idea what parental controls or monitoring procedures are in place in the student homes.

Supervision at School: Even with active monitoring around a classroom, a teacher is only one set of eyes. There are apps and websites that 'look' like a student is doing one thing when in reality, it is a cover for something else going on. When students are on electronic devices, screens are in full view and teachers are actively monitoring around the room to ensure proper usage.

Pop-ups: These can especially be a problem in free apps that are used. Our frustration is that we wish someone's job would be to help us keep the iPads manageable, delete stuff we don't use, and install or show us how to keep students from accessing other sites.

Off-task Behavior: Students know more about technology than some adults. Some students can get pretty sneaky about their computers. Many students also know how to delete the history, but there is a management system through Google where we can still retrieve it.

Filters: Filters only catch so much. The internet world is getting better at going around filters.

Inability to Always Control Content Being Searched: As teachers and staff, we try to closely monitor all times that a student is working on an internet device. With between 23-29 students per classroom, we do the best we can to see all students, but we do miss things. Students could have a few minutes to search anything they choose until the teacher might be back around to their area to monitor. As we follow the 70/30 Rule of Internet Content Filtering, we can adequately address most concerns right away.

- **Explanation of training currently provided:**

- **To students about digital citizenship and safe use of technology?**

Every teacher trains students on appropriate usage of technology and the internet in their own classrooms. Our computer lab aide works through the district's advised internet safety training with the students the first couple weeks of school, when the students come to their regularly assigned computer time. No student gets on a computer at the beginning of each year without these trainings. Our computer lab aide also reviews the trainings during each trimester as reminders for students that have already been here, but also as new training for new students

that have moved in. In the computer lab, the aide uses NetSafe Utah videos and discuss their application in detail.

K-3 topics include:

- The internet is not the real world.
- Be kind online, just like in real life.
- Don't give out any personal information to someone you don't trust and know in real life.
- Tell an adult you trust if anything happens that makes you feel sad, uncomfortable, or scared.

4-5 topics (in addition to the above) include:

- What to do about cyberbullying.
- How and why to be careful posting pictures online.
- How and why to be careful making friends online, in general do not befriend someone online that you don't know in real life.

Later in the year, we review these same topics using other videos/songs, etc. with discussion. And of course, we have a discussion on the spot anytime a kid has a question or something happens that provides a good teaching opportunity.

The following is the focus in our computer lab: **Digital Citizenship in the Computer Lab**

1st, 2nd and 3rd grades:

Netsmartz Kids - <https://www.netsmartzkids.org/videos/>

We watched two videos and discussed them together.

The videos were NetSmartz Generation and It's OK to Tell

We talk about what information is safe and unsafe to give out online.

We also discuss what we should do if something comes up on the computer that makes them feel like they have "lost their color". Who their trusted adults are at school and at home.

4th and 5th grades:

TypingAgent.com (our keyboarding site) has a Digital Citizenship section. It shows a short video and then has the students answer a handful of questions at the end of each video. There are a total of nine videos and each video has four to seven questions afterward.

We have also used (and will most likely use again this year) [Interland](#) which feels more like a game to students, but still teaches digital citizenship.

• Explanation of training currently provided:

- **To parents and guardians about how to discuss and support digital citizenship and safe technology use with their children and how to report inappropriate content?**

This document is posted to our school's website: pes.washk12.org

A summary of this document will be sent home in the back to school folders the first day of school OR reviewed face-to-face with parents at the first SEP of the year. The summary page will have a signature for parents and students to sign to ensure the material has been reviewed.

There is a bulling link on our school website. This link may be used for parents/students/anybody to report any kind of inappropriate conduct or concerns.

Parents are always welcome to contact the child's teacher or administration with any concerns.



School Internet and Technology plan for



- Items with a checkmark are allowed at school
- Items with an x are not allowed at school

Lexia Computer Program

Free Time

Required Testing

Special seating arrangement in the lab is required

Research Projects

Computer Lab

Center Time

In an effort to help _____, this plan has been set in place by those who sign below to safeguard his/her needs and allow him/her to still participate in most activities regarding technology.

Student

Parent

Parent

Teacher

Administrator