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Loudoun County School Board, Technology Steering Committee Meeting, Thursday, February 16, 2023

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Place Loudoun County Public Schools / School Board meeting (see BoardDocs / LCPS-TV)
Length 29m (video)

- Official meeting video (Vimeo / LCPS-TV): <https://player.vimeo.com/video/799712801?rel=0>
- BoardDocs (School Board): <https://go.boarddocs.com/vsba/loudoun/Board.nsf/Public>

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Speech-to-text: whisper.cpp, model large-v3-turbo. Produced 2026-10-22. Each paragraph starts with its time [HH:MM:SS] in the meeting video.

[00:00:03] Good evening. I'd like to call to order the February 16th, 2023, Technology Steering Committee. I've been informed that Ms. Korbo would like to participate remotely in tonight's meeting.

[00:00:24] Ms. Korbo, would you be able to state your location and the reason you would like to participate remotely? Yes, thank you. I'm home. I'm alone. Under Policy 2420, I'm asking for remote meeting participation due to an ongoing disability and medical condition as recommended by HRTD under federal ADA disability law.

[00:00:49] - Okay, I would entertain a motion for Ms. Corbo to participate remotely for a medical reason, for a personal reason. There's no motion or second for medical reason.

[00:01:07] Would you like to use a personal exemption, Ms. Corbo? - Thank you, Mr. Beatty. I'm not going to do that for this meeting since it's informational and those are limited and this is for medical exception so thank you okay and with that we'll move on to public comment i've been informed that we have one public speaker and uh given the shortness of the list i will allow for five minutes so that mr anthony shortino is that great thank you for uh hearing me out today my name is anthony

[00:01:46] shortino my daughter is a fourth grader at catoctin elementary school i came today just because i I wanted to discuss, you know, like a lot of the content and Chromebook use. You know, we

found out this summer my daughter has ADHD and dyslexia, so she has educational challenges as it stands, and I feel like the Chromebooks at times have become, you know, a big vice and distraction for her and her education.

[00:02:10] Particularly, you know, her and her friends, especially when they're at CASA after school, have a very bad tendency of kind of getting lost in YouTube and other things, as opposed to being involved in more educational activities. So, you know, just really would like to see, you know, as someone that works in technology, I would like to see a reduction in technology use, access, and reliance across the county.

[00:02:34] You know, being in my mid-40s, you know, I grew up at a time when we didn't have computers in the house, right? We barely maybe had an Atari. So it's kind of a culture shock that my daughter, you know, knows how to use a computer when I never even dreamed of having one at her age, right? So it's, you know, one of those things where, you know, I would like to see, especially at the elementary level, for us to get back to a simpler education model, more paper and pencils and books than, you know, technology and computers.

[00:03:03] I think that the, you know, like I said, being that I work in technology, you know, and seeing a lot of young kids that don't even understand what it was like to have to have a phone that was hooked to a wall. you know, it's kind of, you know, enlightening to me that, you know, we've come a long way, but we've not stopped to think about, you know, how early or how soon is too early and too soon for technology. You know, given, you know, the situation with the pandemic, I understood the technology use and was more than happy to live with it. I think, like I said, at this point, I think we're, I think at a point where we should start looking to scale that back,

[00:03:39] especially at the elementary level. I just can't imagine, like I said, you know, I grew up doing spelling tests you know you had to earn the right to use a pen instead of a pencil you know things like that had to learn how to write cursive and I don't know that this happens as much for this younger generation of kids and I feel like they're kind of missing out on life skills that they will potentially need at some point in their lives or at least I would imagine they will need it at some point you know and again I don't really blame technology companies you know they're all out there they're there to make a dollar and you know especially when you talk about larger social media

[00:04:15] companies, they're fighting an uphill battle to try and moderate and control content. And even the best filtering and technology is not going to be able to stop everything. If somebody wants to get something out there, they're going to find a way to get it out there and get it to the people they want to see it. So it's up to us as the adults to take the reins and say, maybe we should step back on this and think about when this is appropriate and how much of it is appropriate. And, you know, like I said, it's, you know, it's one of those challenges. And especially for children with ADHD, Screen time can be a bad thing for children working through that.

[00:04:51] And so, like I said, it's just one of those things where I feel like this is the place to come to have that discussion, to look for that relief or for that new direction, especially for the younger students. That's all I have for you all today.

[00:05:07] Thank you for your time. Thank you. And with that, public comment is over. We'll move on to the approval of the minutes. Is there a motion to approve the minutes for the September 15, 2022 Technology Steering Committee? Okay, I'll move to approve the minutes of the September 15, 2022, Technology Steering Committee.

[00:05:30] Second. All those in favor of the motion, or any discussion, all those in favor of the motion, please raise your hand and say aye. We have one abstention. Ms. Sheridan said that will pass 1-0-1. And with that, we'll move on to item 4-1, our information item.

[00:05:49] And this is a review of policy, 8650, student technology, and the acceptable and responsible use. And with that, Mr. Smith. Excellent. Thank you. tonight we bring to you for the first reading policy 8650 student technology acceptable responsible use this was to be reviewed this year as part of a five-year review process but also is part of the state grand jury policy changes so that's why we bring this before you today and i have mr wes allen here to help with any any of our division council questions as we walk

[00:06:23] through this so i'll walk through a handful of changes here the i'm in the red line version for those of you following along the first few changes are merely grammatical changes um getting down to line i to line b uh item b line 27 to 28 is just a clarification of which that this includes any programs applications or other platform designed to use to bypass the lcps content filtering protection protections that's a line that was in our staff acceptable use so we just wanted some consistency there i think the intention was that it was already there but we clear that was added

[00:06:59] to clearly outline that going down to the next substantial change is item c1 it originally read child pornography which comes directly from the definition of what you need to content filter in order to qualify for eat rate funds the cipa definitions and this at the recommendation of msac i believe we changed that to just pornography of any kind so not not to just only say that so we took that recommendation. The next substantial change is line 53, which basically rewrites

[00:07:33] our cyberbullying section to make it clear and include sexual harassment and some other items that Division Council included in that section. And that's really all the substantial changes to the policy. I'm not sure if Mr. Allen has anything to add. And we're happy to answer any questions. Thank you very much for that. Committee members, any questions on this. So what kind of changes based on the grand jury report? You said we've got the change

[00:08:08] to the content filtering, and I think this will be more for the discussion item, but have there been any changes because of the grand jury's report in this policy or any anticipated changes? I believe the changes are clarifications to make sure that things like you can't circumvent the LCPS content filter are specifically stated in the policy. We're kind of the primary major change, and then adding any of the sexual harassment language into this policy as well. Neither of those items are there before yes knowledge you go mr. chair I just get further clarity so by clarifying the language does that make it easier to

[00:08:45] implement the policy and then therefore also hold students accountable if they violate the policy is that the intention here the kind of the domino effect of that I think correct I think the intention was there to not do anything inappropriate on the network and to circumvent tools or systems or filters or layers of security we have in place this just specifically calls it out so there's a specific reference to that thank you okay no I think these are good changes I think it is appropriate and I'm I do want to have more of a discussion about the content filtering specifically so we can move that to the

[00:09:22] next item so we'll bring us back for can I ask one question before we move on in this policy staff wanted to get feedback on our item H which says that this policy specifically will be reviewed every two years we have a five-year policy review process in place is that something the board is the intention the board wants us to bring this back every two years which is fine i just want to make sure we have alignment with our processes and expectations of what's in the policy what is this in this is old language or

new language uh this has been in the policy um and it wasn't brought back up i think it was due to come back up during the covid closure originally and so now we are bringing it back up this is the

[00:10:01] five-year review so it's been five years since it was reviewed so staff just wants clarification of do we do you want us to bring this back every two years which we would do um or do you want it to adhere to the standard policy timelines i i can actually speak to this um pursuant to the code virginia 22.1 70.2 aps are acceptable internet use internet use policies um must be revisited every two years so that's why this is in here yeah and i think that's a good practice especially given things will probably change so quickly as we heard in public comment even if it it wasn't code. It's a good practice given that technology changes so

[00:10:39] frequently. Okay so we would plan to bring this back two years from except so that would be 2025 when we would bring it back again. No I think that's good. Anything else? And with that we'll move on to our discussion item 501 internet content filtering approaches. Excellent thank you for the opportunity to talk about internet content filtering. It's one of our favorite topics something we talk about regularly in our office and it's an ongoing it's a continuous

[00:11:16] improvement lifecycle so tonight we're going to talk about our internet access overall and then our content filtering approach in different content filtering approaches and what that looks like first just to kind of level set the total number of websites in the world there's about 2 billion websites that exist across the internet at this point I mean you can kind of see when we started content filtering in 2001 it was a completely different landscape that we were trying to go towards than where we are now with just the amount of content that is available out there and then I also wanted to share some statistics this is LCPS specifically so you can see this is for one month from January

[00:11:54] 3rd to February 2nd and so just some numbers I'd like to call out three hundred and four thousand unique users on network so this includes student devices student personal devices facility use after hours weekend use there's three hundred and five thousand unique devices on network on network this past month and those devices went to 2.2 billion websites not all websites those are not unique those are website visits that they're visiting out of that we had about two million or 200 million blocks you see about a 10% block rate for what they're going to 46 million searches and watching 3.3 million videos

[00:12:33] so just kind of want to set the stage for the quantity of access and visibility that we have in our system right not very much this is also a snapshot of the month so you can see the traditional weeks school weeks where you have you know where we would see about a hundred million visits every single day but then you can also see we have still substantial usage in the millions on weekends and both visited and blocked so this is student devices at home but also people on LCPS Network we really have but we are 24/7 365 with the amount of usage we have with our facilities, rentals on Sundays, all of those type of things

[00:13:13] where our networks are being used during those times. And then I also wanted to highlight that our content filter access list is available on our website. It has been available for several years now, and it does get updated regularly as we make changes. So this is available, and it shows our existing categories that we block, what is included in those categories.

[00:13:35] This is the mature content area where you can see everything's blocked for everyone. And then our categorizations by K-2 students, 3-5 students, middle, high, and staff. And then searches are also filtered.

[00:13:53] Our content filter is an agent-based content filter, which means there's something on the device. No matter where the device is at, it's getting content filtered. And the same restrictions are applied no matter which network an LCPS device is on. And that also enables us to see things like before SSL encryption happens, we're able to look into things before it's encrypted. So we're able to see traffic before it gets to Google and it's an encrypted search. So we're able to filter those things out ahead of time. So now content filter approaches. So there's basically two approaches to content filtering,

[00:14:27] allow listing and block listing. Allow listing basically is where you have a predetermined set list of websites that staff or students are allowed to go to. Everything must be pre-configured as allowed. It works really well for small groups. We have certain students who need that focus and who are in allow list groups based off of working with school administration but there are challenges with that approach it is the most secure approach but but the most secure computer is one that's turned off and put in the corner and not plugged into anything so we have to trade off this how

[00:15:02] usability in being able to actually use internet services so a couple challenges online resources are complex and interconnected these aren't siloed websites these are completely interconnected with content and certificate certificates that are available on the internet so it's much more of like a spider web when you're unblocking a website it can be up to a hundred different websites you need to unblock depending on where contents being delivered from what they're using for analytics what other integrations that they have we were able to pull a couple for things like canvas which again our LMS system is Schoology but Nova Community College uses

[00:15:42] canvas so that is one that we would have to pull and unblock for our dual enrollment students who use that tool and there were over a hundred unique configurations that would need to be input into the system in order to allow that and they're ever-changing so you have to keep up and manage that the consistency of access to sites is impacted as these things are changing it's not dynamic it's very static and it requires a large staffing resources to manage that currently we have about we have two people who spend about half of their FTE managing the content filter and we would estimate for the level of access that we have and the amount of access that we have and the amount of

[00:16:21] resources that would need to be unblocked we could possibly be a hundred staff members that we need to be managed this it would be a significant lift for for that and these are coming from our recommendations from our content filter and company as well as talking with other school districts that we've talked to block listing is our approach right now it allows access to sites that are not blocked so it's you're allowed there unless we say now it's based off of category and it allows us to utilize built-in web crawling technology and our agents artificial intelligence that pre-categorizes sites for example we block every gambling site but I don't need to know what every gambling site is

[00:16:58] it automatically categorizes that for us it is a common best practice among k-12 school districts every school district we talk to this is the practice this is our region for this is large school districts Miami-Dade New York this is a common practice among all of them and that was confirmed by our content filter vendor as well and uh the challenge is though it categorizes it categorizes websites automatically so we do constantly this is the continuous improvement process where we're constantly making changes to that moving things maybe there's something that's blocked that we need allowed for a specific group or subgroup or dual enrollment class or those things or maybe there's something that

[00:17:35] traditionally would not be blocked like a chat gpt or something like that where we do block that intentionally. So we are constantly making modifications to that. That's pretty much an overview of our content filtering approach technologies and we're happy to take any questions. Mr. Sheridan, any questions? Okay, I got a couple. So going back, we're just going to go slide by slide. With the numbers you present on slide four, how many, you've got two, you said 2.2 billion website visits, but do we have a breakdown for how many unique websites that is?

[00:18:14] Because there's so many of them, there's over a million of them. We categorize them by top hits. They would be things like Google, a lot of Google Suite tools. So we don't have, like, necessarily a full list from our report, but we can see, like, top 10, top 20, top 100 of those visits.

[00:18:31] Okay. Yeah, I'd just be curious to, like, what the long tail of that is. I mean, obviously, you got the slide before that there's a lot of websites, but we're not obviously visiting all those, and I would imagine that the \$1.98 billion, not everyone's education. So it would be interesting if we can get into that.

[00:18:47] Now, I know just in my day job, looking through the logs and stuff, like just as you said, like the Google suite, just going to google.com and all the things, like there's five or six different little subdomains for Google. So I can see, like, that's why I'm kind of curious of what kind of roll-ups are available that we could get into there so that we could actually break those down.

[00:19:08] Because, like, Apple specifically, if you're on an Apple device, there's tons of different domains, And I think they do a lot of domain rotations in order to, because they've got a bunch of CDNs and things. That's Akamai URLs and such. So I'd just be curious, like, what's sort of the breakdown?

[00:19:24] And, like, how many of those websites of that 2.2 billion are sort of uncategorized or don't fit into anywhere? Because, you know, if you could look at that and say that, well, really, there's probably 100, like, subgroups in there. And there's maybe only, you know, that we could actually allow.

[00:19:41] And then really there's only maybe a million or so websites. But like what websites are not actually categorized and we don't know. I think that would be interesting to know as we go through this discussion. Obviously 200 million website blocks, that's a lot.

[00:19:58] But again, like a lot of that could just be ad traffic that we're blocking or something like that or analytics and things. So that brings me to another question. So you talked about Canvas specifically. And I've used Canvas and it's an interesting tool. that there's again like there's probably 800 you said there's a hundred different he's at 100 configurations could you speak more to that so there's um when you so this was an example that our content provider or our content filter vendor provided to us of other jurisdictions who have had to allow it um so canvas is one of not every company does this but they publish a list of what you would need to unblock to white to allow this them um to um come through and so those would be

[00:20:37] things like IP ranges you need to allow, content delivery networks that they use, all of the URLs that could be embedded in that. And each level of that tool, you may do, first page has this amount, and then the second page has a completely different set where they're going someplace else. So as you navigate through the tool and kind of do that breadcrumb hopping around, you're not necessarily always in the same domain or with the same servers or with the same providers. So that's where that comes in. And so that list was published on the canvas web page under their support article and that was what was provided so those are the type of things you'd have to unblock there's other things with like security certificates and where

[00:21:14] those are being generated from and validating those sources and analytics tools that are built into those so there's just not just blocking unblocking canvas.com it's everything else behind it too um so then specifically you mentioned the ssl certificates but then you with the content filter is filtering on the device for the most part is are there gaps in that though where it actually can't filter on the device because of the way it is. Now, I imagine like we talk about LCPS open has content filtering and now we don't have, we're doing content filtering there, but we are not necessarily filtering on the device there because it could be someone's

[00:21:50] personal phone. Is that sort of a gap and that's where the problem of allowing this is or, you know, does it need to be, I guess, does it need to be in the policy that if you're going to use something like Canvas, you have to go through an LCPS device and if it doesn't work so sorry you know that's that's not LCPS' responsibility. So at this time the approach is students use the device that they're comfortable with. We have a 98% acceptance rate on Chromebook but there's still 2% of students who choose to use their MacBook or their personal device because that's what they're comfortable with. Those devices are on our BYOT or LCPS Open network.

[00:22:22] LCPS Open is content filtered. It actually is much more restrictive and it is doing kind of like a blanket layer of anyone who uses this network has this level of content filtering and then we're able to have specific content filtering on the device and no matter where the device is at it has an agent and it actually bypasses that filter so we're not double filtering it and goes to a cloud-based filter so those following you're trying to remember the following the question those students are still doing dual enrollment work for LCPS classes so we provide that level of access on our devices for them to support that use and we have lots of

[00:23:00] use cases like that between students doing multiple things being involved in multiple things we have things just as inventive as students and classes and schools can be we have that many areas we've had a student do a Raspberry Pi device to communicate with the space station to get automatic updates into their school so that was a whole thing that we had to do and those are those are areas where those things go in the BYOT or specific networks and then we developed the rules to allow that to work.

[00:23:32] It took us about three weeks to get that technology to work because NASA really doesn't have a how-do-you-communicate-with-the-space-station wiki that we could just go to. So it took sniffing the network, determining IP addresses, capturing traffic in the air, making those changes, and it was like a trial-and-error type thing so we could get it to work.

[00:23:49] Is that because you blocked ChatGPT? Let's see. Are we blocking any TLDs, or is it really just like content groups that the content filtering provider have?

[00:24:05] So we have specific blocks in place for different levels. For example, the content filter doesn't know if ChatGPT should be or should not be allowed. It puts it into, you might want to think about this type group, and then it's up to the division to put those blocks in place. Another example is we block something like Wikipedia for grades K through 8, but in the 9th through 12, it's actually part of their curriculum about using inappropriate resources, and so they have those type of things, So we need access to that tool.

[00:24:32] So we have different blocks in place specifically for LCPS needs that wouldn't necessarily just be what the vendor would provide us, like a cookie-cutter implementation of those things. And I guess the final question I've written down. So the primary responsibility for this filtering list is the vendor.

[00:24:48] The ones are going through, and I'm just thinking, like I was today looking at some of our lists and stuff, and this game website got through, and it wouldn't load the games because i think we're coming from other websites speaking of websites having lots of different content but um you know that was to me that was a failing on our particular content provider content filter provider so is the primary responsibility for managing these groups that are the content provider or is that those two ftes who are doing it spending half their day managing it like they spending most of the time going through the websites and and determining

[00:25:27] whether or not it should be allowed so our teams would manage those things from a it's been reported at a school or we have seen this instance of this, something was reported to us, we need to go through and take a look at that. So they're kind of definitely much more of the, we've noticed this or we've seen this, a lot of these are network security related items too.

[00:25:47] Maybe we get a bunch of phishing emails from something, like we block traffic for countries and other things that we're not sending things places. So the content filter is a content management tool, but it's also a security layer tool, so there's some of those type of things in it every day. But the categories, when you're talking about the 2 billion websites that exist, the vendor AI web crawler technology goes through and categorizes those.

[00:26:08] So a lot of times we'll have someone who, for example, is trying to use a website to make a restaurant reservations for their staff party. And they can't because it's classified as alcohol because that restaurant has mentions that on their website. So those are the type of things where those things get categorized by the vendor. And then depending on the situation, maybe we'll open it for staff if there's like an event venue or we're trying to make reservations at \$17.57 for the room, but we can't access the website because they have all these other things on their website.

[00:26:32] So that's kind of how that technology works. Actually, one final question. So going back to specifically, and we brought up this in email chains and stuff, but like the problem with YouTube and Google searches, right? So it doesn't make sense to block YouTube.com and it doesn't make sense to block Google.com.

[00:26:49] Now you've said we're able to see some of the searches and things on the page, but are there ways to block particular videos? I remember there was a Peppa Pig video that was sent, and the child I think was innocently looking for Peppa Pig videos, but sort of not necessarily innocent versions of these videos were showing up with kind of lewd audio over that.

[00:27:12] What can we do about that other than just blocking YouTube.com? So for K-2 students, we block YouTube access for that. we also have YouTube in restricted mode so when we're looking at YouTube that's a different functionality inside of YouTube and that basically is like anything that they don't see comments they can't see preview videos and thumbnails they don't anything that's rated in a category that isn't in that restricted mode so there are some sliders where that's available and then we also have content filter groups for students who have disciplinary issues or something where you know maybe their IEP says that they can't do those things but then they get put into those groups where they remove that access.

[00:27:51] So those are the ways we kind of manage YouTube right now. We will block specific videos via URLs, but there's billions and billions of YouTube videos out there in the content. So we try to be as restricted with our YouTube configuration as possible and to still allow it to function because YouTube is also embedded in many, many websites for their depth, their content generation.

[00:28:14] So if you want to go to watch a news video on a website, that's being hosted in YouTube on the back end, right? And then for Google searches, we direct everything to safe search. That's one of the reasons we limit, even if you do a Bing search, it goes back around and uses Google safe search because we can enforce safe search.

[00:28:30] And that limits things like no thumbnails that pop up, just the type of challenges we've had in the past when we weren't using those things, where it does enforce a safe search engine from Google. And then if they do an inappropriate search or they're searching for something that we need to have a keyword alert on, and that's also part of that as well.

[00:28:49] So in that, Google searches are encrypted, but because they're typing it in before they hit enter, we're able to see those things in the transit before it gets to the encryption side. Thank you very much for that. I appreciate it. Can we share anything? You're welcome.

[00:29:07] So, all right. We'll move on to item six, new business. Is there any new business? Okay, seeing that, we're adjourned. Thank you, everyone. Appreciate it.



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