

K-12 Web Filtering

The Good, the Bad, and the Ugly



It doesn't have to be a dumpster fire (unless you want it to be a dumpster fire).



Who we are*



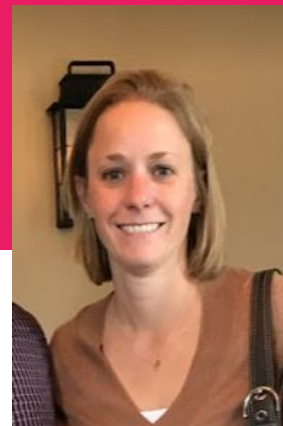
Bob Gendler
Apple Platform Engineer



Damien Barrett
Mac Education IT Pro



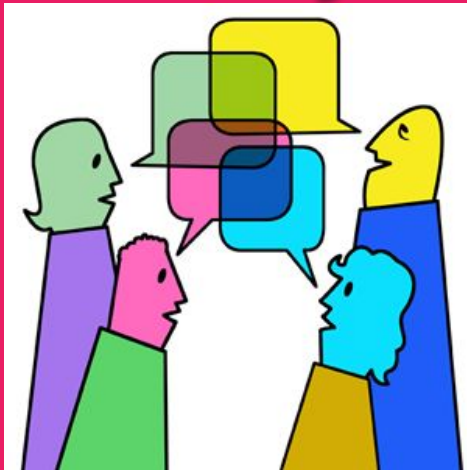
Jarrod Coombes
Network and Systems Admin



Amanda Wuest
Client Systems Admin

* We are not experts in this realm, any advice given by us should be taken with a grain of salt, a shot of vodka and maybe a consultation with your attorney, priest or mother. Possibly all at the same time.

What we're talking about today



- Type of School and Culture of the Community
- Different flavors of Filters
- What we use
- Preventing getting around the filters
- Other ways to “filter”
- Your filtering, questions, issues, and gotchas

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Type of School and Culture of the Community



Public School

vs

Private School



Is Web Filtering mandatory?

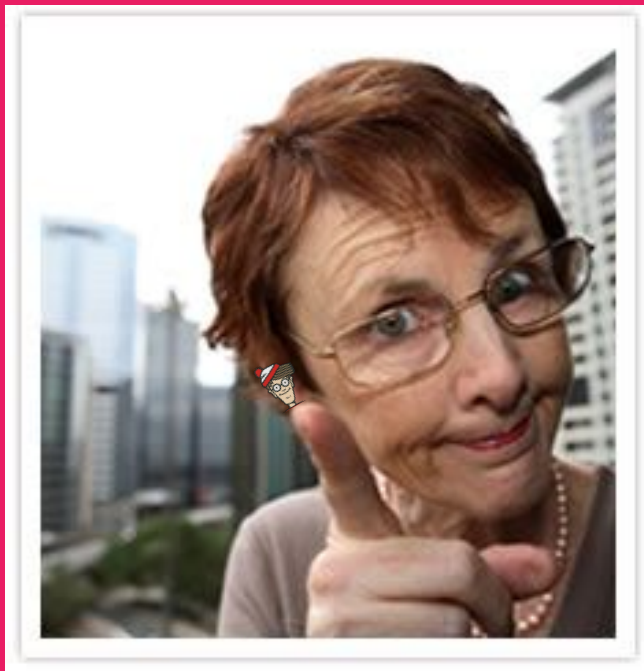


COPA – Child Online
Protection Act of 1998

COPPA – Children's Online
Privacy Protection Act of
2000

CIPA – Children's Internet
Protection Act of 2000

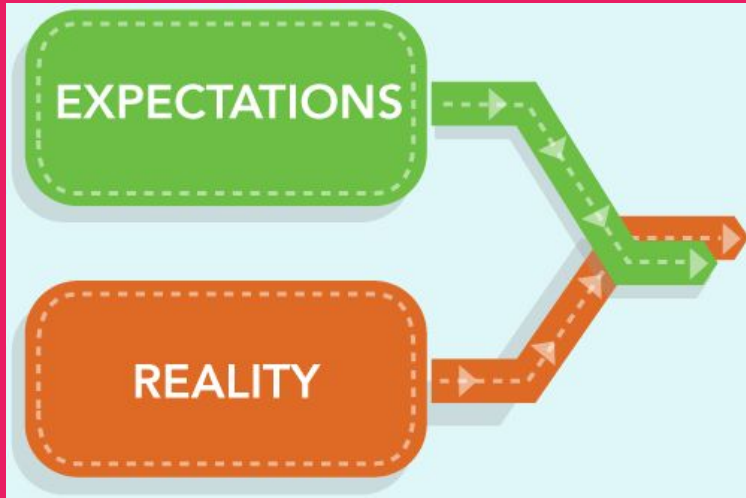
Managing Parent Expectations



Quite simply, this could
be the hardest part of
your job

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Managing Staff/Administration Expectations



“Is it 5 o’clock yet?”

— — —

Perfect Filtering?

fair·y tale

/ˈferē tāl/ 🔊

noun

a children's story about magical and imaginary beings and lands.

synonyms: [folk tale](#), folk story, traditional story, [myth](#), [legend](#), [fantasy](#), [fable](#)

"the movie was inspired by a fairy tale"

- denoting something regarded as resembling a fairy story in being magical, idealized, or extremely happy.

modifier noun: [fairy-tale](#)

"a fairy-tale romance"

- a fabricated story, especially one intended to deceive.

synonyms: [lie](#), [white lie](#), [fib](#), [half-truth](#), [untruth](#), [falsehood](#), tall tale, [story](#), [fabrication](#), [invention](#), [fiction](#); [More](#)



No filter will ever be perfect, you need to have secondary and tertiary methods in place, and rules for deliberate or inadvertent circumventions.

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Flavors of Filters



- Cloud vs Onsite
- DNS Based
- Packet Inspection
- Client Side
- Proxy Based
- VPN Based
- Heuristic
- Simple Black/White Listing

What we use



OpenDNS

smoothwall

untangle®

securlly://

idgss



<https://www.iboss.com/>





<https://www.untangle.com/>



smoothwall®

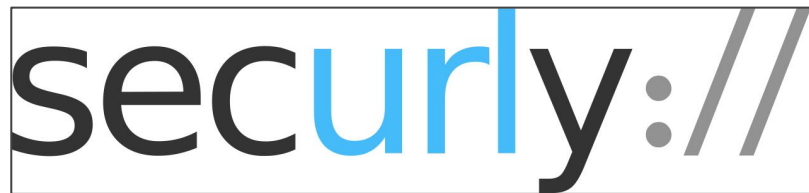
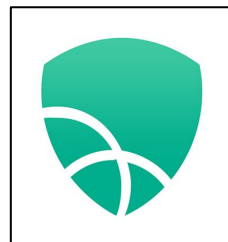
Web Filtering + Security



macOS



iOS





Preventing circumnavigation



“Never underestimate the ability of a bored school kid who is motivated to defeat your filters”

— — —

Other ways to “Filter”



Because Torch.app includes an embedded P2P application, this software is not allowed to be run on MKA-owned computers. For web browsing, please use Safari, Firefox, or Chrome. P2P activity is prohibited by MKA's Acceptable Use Policy.

OK

- Application Blocking
- Chrome Extension Restrictions
- Hosts File
- DNS black hole
- Confiscate devices and go back to pen and paper.

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Decrypt and Inspect (HTTPS filtering)



Do you want to inspect all
SSL traffic?

Cyberbullying protection



It's a thing

— — —



Thank You!

