TECHNOLOGY AND DATA PRIVACY ADVISORY COMMITTEE
(TDPAC)

REPORT TO THE BOARD OF EDUCATION

May 7, 2020

Committee Members: Jennifer Butts, Susanne Cornado, Adam Greer, Scott Maize, Cheryl Mosier, T.O. Owens, Dan Rohner, Phillip Romig III, Jennifer Ross-Amato, Mike Wilcox

Summary

Brett Miller, chief information officer, started the meeting by informing the TDPAC committee that the Board of Education would like written feedback on remote learning for the annual report to the Board. The committee was asked to frame the feedback by focusing successes to build upon and areas for improvement if some form of remote learning were to continue next year. The committee was also reminded that because of state funding issues Jeffco Public Schools will likely have fewer resources next year. The report would be shared with the Board of Education beginning of May 2020.

Chris Paschke, executive director of information security and data governance, gave a presentation walking the TDPAC members through the technical aspects of remote learning focusing on: core infrastructure, educational cloud tools, video conferencing, and staff supports/resources. Below is the committee feedback.

Areas of Success:

- Jeffco Public Schools was quick to get the online learning into place prior to students going out on Spring Break giving staff the opportunity to fine tune a lot of the process while the Students were on break.
- Teacher interaction occurring, especially through virtual meetings with students as well as their peers maintains connections and improves motivation.
- Keeping services flowing to students in need means a big boost to those who may experience a greater educational decline in this environment.
- Going above and beyond to fill the gaps in procedure and ceremony, like sensitivity to graduation and continuations are appreciated.
- Ed Tech team is providing weekly support to teachers needing help with online learning for their students. Sharing ideas and support tools with all staff.
- Information Technology team has taken steps to insure technology being used is safe for our students and staff to use.
- Information Technology team is providing hot spots and devices to families that need them to engage in the online learning.
- Information Technology and Ed Tech teams have created Tech Tips and Platforms to help support our staff, students and parents through the online learning process.

Areas of Improvement:
• Strategize ways for younger students to complete assignments for parents who work.
• Keeping older students engaged/involved especially as the school year winds down.
• Getting parents involved with their child's grades / school work. If there is an issue parents need to find ways to work with the teacher to get them back on track.
• How will students have the same learning experience?
• Concern around students set up's at home. Small devices and improper workspaces such as bedrooms are an ergonomic concern. Need for a larger monitor, keyboards, ports could help ergonomics. Is this something the district could help provide for students in need?
• Grading concern. Accountability for attendance.
• Special Ed innovation IEP concerns basically on hold now.
• Face to face and social interaction is lost. Need to find creative ways to get this back safely.
• Accessibility and 508 compliance should be considered for continued remote learning.

Possible Hybrid approach and other concerns to take into consideration:

• We need to consider that many of the resources such as unlimited bandwidth for families, discounted internet rates, and free access to tools like Zoom will not be available next year.
• With online learning / work from home snow days would not be used.
• Resources will be constrained with budget cuts.
• Continued attention to Mental Health is equally important.

The following information was taken into consideration when securing Jeffco Public Schools remote learning technologies.

• District technologies such as Chromebooks and cloud systems are now the classroom, playground, and hallways. All this tech lives in kids homes so we must balance student safety, digital security, and privacy.
• We can no longer rely on systems like our network, firewalls, and servers to protect data because all access is occurring at home.
• Many staff and students may choose to use personal devices which further limits the tools available to protect our data.
• Constant communication is important because remote learning tools and strategies quickly change.
• Attacks such as phishing, malware, and account theft will increase.
• Laws, regulations, and guidance will not catch up until the school year is over.

Background

Core Infrastructure and Cloud Tools:

IT staff members focused on augmenting the following technologies to meet the demand of remote work: VPN, file shares, phone system. IT staff also assisted in finding creative solutions
to challenges ranging from issuing refunds to complex integrations issues. Ed Tech staff members focused on standing up remote learning by leveraging tools already being used for the Tech for Ed deployment such as: Google Classroom, Schoology, Seesaw, Pear Deck, Screencastify, and Flipgrid.

The InfoSec team partnered with both groups to ensure new technologies were implemented securely. Core tools were secured by ensuring proper scoping was completed to ensure risks could be effectively managed. Technologies like log management, least privilege, configuration management were used to mitigate against the increased risk of ransomware and data loss. The recent purchase and implementation of Palo Alto Cortex on district laptops and servers allowed incidents to be managed remotely just as easily as on site.

The following principles were also applied to cloud tools that were used:

- **Identification** – to ensure that our users are uniquely identified in our systems and we are using good usernames and passwords so people can’t impersonate us.
- **Logging** – that tracks user behavior and shows: usernames, login/out times, IP addresses, and activities.
- **Least Privilege** – we only want to store information in our systems that is necessary. Unnecessary data = unnecessary risk.
- **Data protection** – we want to ensure that our tools are using technologies like encryption to keep data safe at rest and in transit.
- **Privacy** – ensure our cloud providers are not doing anything inappropriate with our data: selling it, sharing it for advertising, keeping it for longer than necessary.

**Video Conferencing:**

Video conferencing systems received a lot of press coverage as the world shifted to remote work and learning. Much of the coverage focused on the risk associated with using these powerful tools incorrectly. Jeffco took a very cautious approach to implementing video conferencing tools in order to keep our community safe. Video conferencing tools such as Google Meet and Zoom were only implemented if they could be centrally managed and provided the protections listed in the section above. Communications such as this Zoom Update and staff professional development were also very important in keeping our families safe and well informed.

**Staff Support and Resources:**

A truly astronomical amount of staff and community educational resources were created to support online learning. These resources are instrumental in keeping our community safe. Staff professional development started the day before remote learning began with 25 virtual PD sessions and expert office hours. Remote Monday professional development days have grown, now offering 110 sessions daily with over 1700 participants remotely attending. Professional development days are widely accepted with 95% of teachers indicating the sessions meet their needs. There are also daily Schoology conversations, tech tips, and online resources available for staff members. Families also have the ability to contact the service desk and a dedicated online resource available for support.
TDPAC Website:
https://www.jeffcopublicschools.org/about/board/district_advisory_committees/tdpac