Technology

FOCUS AREA 1
Devices

Each district and school faced different challenges as they are all in different places in regards to devices and access. Districts that had already established 1:1 initiatives providing a device to each student now had to be able to take it home. Districts also had to provide access to content through Wi-Fi hotspots so that the use of the device connected students to the resources. Districts that were not 1:1 had to quickly survey the need and start providing resources to students and staff.

Due to the uncertainty with COVID-19, different considerations were taken in this focus area as the fall may continue a distance component for students.

1. ESSENTIAL QUESTION: How do we provide a standardized platform for students and teachers to ensure seamless lines of distance learning and communication among the school community?

Implementation, Recommendations, and Considerations
The information technology department will work with LEA stakeholders to identify and support platforms. The information technology department will survey students and teachers to quantify the needs across the county. This includes computer device maintenance and troubleshooting. Ongoing feedback will be essential to ensure that students have access without disruption. LEAs may want to consider engraving devices with a school logo to prevent theft or loss of property.

LEAs may already have a standardized learning platform and need to work with curriculum teams to ensure that teachers and students are able to have access to these resources. The IT department should also work with stakeholders to ensure proper licensing and access is available to resources.

2. ESSENTIAL QUESTION: How do we ensure staff devices have received all updates (i.e antivirus) and are ready to use remotely upon return to school?

Implementation, Recommendations, and Considerations
In order to ensure that students and teachers have the most updated devices upon the return from school or for distance learning, the IT department is recommending a helpdesk system to track issues and a central device management system to manage updates and devices. To gather information, create a survey for teachers which will give you an understanding of what types of connections and devices they are utilizing remotely. Also, run reports and updates on system logins. Work with unions on bargaining for any potential issues of monitoring and everyone should understand the expectations of working on LEA owned devices and networks.

Resources

- Google Classroom
- Moodle
- PowerSchool
- Canvas
- Blackboard

3. ESSENTIAL QUESTION: How do we provide students immediate access to a device at home to create a flexible and fluid learning model?

Implementation, Recommendations, and Considerations
You will need an understanding of expectations pertaining to student outcomes and suggest you work with the educational services department to obtain these. Utilize existing technologies and scale to meet the demand. Create a survey for parents/students to ensure that they have access, then create a plan with the educational services team if students have a lack or no access at all. Understand the logistics of providing access to a device and timing since some students will need immediate access which they don't currently have. Create expectations for parents, students, and information technology staff on providing a device, the utilization rules, and pick-up/return procedures of the device.

Resources
- Wireless provider resources
  - » AT&T
  - » Sprint
  - » T-Mobile
  - » Verizon
  - » Kajeet
- FCC Statement
- Wired Providers
  - » CDE List

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4. ESSENTIAL QUESTION: If students have school devices at home, do we let them keep devices over summer or collect them at the end of the school year?

Implementation, Recommendations, and Considerations
Maintain an up-to-date inventory system so you know where your devices are. You should create mechanisms for repair and replacement and also consider drop-off and cleaning procedures. It may be helpful to create processing areas at sites or a central location for all drop-off and maintenance requests. To prevent theft, consider engraving devices with school logos. Also, utilize tools for remote administration of devices such as a Mobile Device Manager (MDM). It will be important for districts to know the status of devices during a distance learning environment. This will allow IT departments the ability to support and know the status of devices.

Resources
- Existing vendors may provide this service
- Select software management that works with existing environments
  - » Apple
  - » Google
  - » Microsoft

5. ESSENTIAL QUESTION: Has the infrastructure been evaluated to ensure devices can be supported again back at sites?

Implementation, Recommendations, and Considerations
You will need to identify the number of devices needed and your current infrastructure limits. LEAs have increased the number of devices during this time to meet the distance learning environment. As devices are returning back to sites, it will be important to know the capacity of the infrastructure to support the returning devices. As plans to return are made, LEAs must consider their growth of devices compared to their infrastructural capabilities. This is primarily for districts that tried to achieve 1:1 in a quick time frame and did not support it before in their own network. Work with the IT department to survey current capabilities and align with funding priorities.

Resources
Work with existing vendors or internal staff to benchmark systems.

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6. ESSENTIAL QUESTION: What kind of process should be used to get feedback from students, parents, and staff?

Implementation, Recommendations, and Considerations
Consider sending surveys to stakeholders to discover what can be improved upon. This information is key in deciding where additional resources are needed. Surveys can help shape priorities for IT departments to ensure that expectations are being met by stakeholders during this time. Collaboration between the information technology and educational services teams would help to ensure you are asking meaningful survey questions to serve your purpose. Consider the survey questions and sampling to ensure that quality information is being reported so that it can be acted on accordingly.

Resources
- Google Forms
- Microsoft Forms
- Survey Monkey

7. ESSENTIAL QUESTION: What kind of process should be used to get feedback from students, parents, and staff?

Implementation, Recommendations, and Considerations
Utilizing a helpdesk system to track issues is vital for not only discovering issues, but will also keep track of the steps taken for repair. Documenting these steps helps the information technology staff to expedite service. You can also run reports from the service tickets to identify needs. Survey groups to see what worked well and did not work well in their environments. Setup automated reports to run regularly from the helpdesk system so they are timely. Ensure that reports are meaningful and contain the information you need.

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8. ESSENTIAL QUESTION: How do we ensure staff devices have received all updates (ie. antivirus) and are ready to use remotely and ensure devices are updated and ready for use when the staff returns?

Implementation, Recommendations, and Considerations
Implement a central device management system to manage devices and automatic updates. This system keeps track of what updates are needed and will install them upon logging in or out of your device. Utilized over a virtual private network (VPN), it will be able to install these updates when devices are being utilized remotely. Work with the information technology team to setup a central management system and ensure that updates meet internal expectations of compatibility. Updates are essential to ensure that devices and systems can work well and ensure good user experiences.

9. ESSENTIAL QUESTION: What about adaptive technology devices for students receiving special education services?

Implementation, Recommendations, and Considerations
Information technology will need to work with special education to determine what types of devices are needed and be able to provide devices for students. It may be helpful to create a central location for all pick-up, drop-off, and maintenance requests.

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10. ESSENTIAL QUESTION: How do we collect devices?

Implementation, Recommendations, and Considerations
The information technology department should create a system to collect devices from students as well as staff. Create a central or organized location. Send out a message to communicate to the information technology staff regarding expectations and procedures on how to collect and handle devices as well as the proper handling of their tools.

Ensure messaging to all staff, students, and parents on the collection process. Use the public health guidelines and direction on cleaning, dwell time for disinfectants, or storing devices to ensure the pathogen is mitigated. Also, consider a standard inventory system. One of the most utilized systems for LEAs is Destiny from Follett and is common throughout their libraries.

Resources
- CDC - Cleaning and Disinfecting your Facility (Technology devices included)
- CDC - Guidance for Cleaning and Disinfecting

FOCUS AREA 2
School/Work Environment
The school and work environment as districts come back in the fall creates logistical considerations. Districts and schools must understand timing to ensure that staff and students can return in an efficient way. Technology departments will need to assess the logistics of return and ensure that devices are ready on return.

The environment at school sites and administration areas will need to take into consideration health recommendations to ensure that care is taken of students and staff. Understanding technology can potentially help in addressing how environments can be set up.

1. ESSENTIAL QUESTION: How should we establish dates of return that are not in conflict with critical events such as payroll?

Implementation, Recommendations, and Considerations
Information technology should work with stakeholders on the calendar of events to ensure there are no conflicts with critical business or educational processes. Also, work with bargaining/unions on proper calendered dates to ensure staff is available and that everyone is going back at the same time. There will be no perfect timing, but take in consideration the biggest academic and business impacts. LEAs should have a clear understanding of potential logistical issues and manage expectations with staff and students.

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2. ESSENTIAL QUESTION: When staff return, it will be it will be a high impact time for technical support. What should we communicate and provide for staff?

Implementation, Recommendations, and Considerations
LEAs should create a plan and stages of when staff will return. Once that plan is in place, it should be coordinated with information technology who will ensure support teams will be ready to accommodate the return of all staff and their devices. In developing the plan, LEAs should manage expectations of support to ensure that returning to sites can be managed efficiently. Over-communicate the expectations by providing the plan and schedule of return to not only the information technology support team, but to all staff.

3. ESSENTIAL QUESTION: In classrooms, how do we ensure devices, projectors, printers, etc. are ready for use?

Implementation, Recommendations, and Considerations
Inventory devices that need support and create a plan to address devices to get ready for the return. This information should be communicated to the information technology support staff as well as the on-site technology TOSAs. Work with the information technology support team in understanding logistics of school site locations, classrooms, and what devices are in those locations.

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4. ESSENTIAL QUESTION: Not all students will be returning at the same time. How do we ensure students have access to resources like devices and the internet?

Implementation, Recommendations, and Considerations
Information technology will need to coordinate with educational services to understand which student populations are returning and which will utilize distance learning options. Information technology can use reporting tools to see student access and where the highest and lowest usage is to identify need. LEAs will need planning to provide either learning materials or access to students. Consider the equity of access and create multiple means for students to get instructional material. Create a plan to address how to provide resources to those that may not have access. LEAs should also maintain a roster of students that may need different types of resources.

5. ESSENTIAL QUESTION: How do we ensure teachers can connect with students in a distance learning environment?

Implementation, Recommendations, and Considerations
Information technology should work with administration and obtain the standard means of communication with students. Provide training materials for parents, teachers, students, and staff on different ways to connect along with instructions. There should be ground rules established when creating the expectation of availability of teachers such as online classroom hours. Always consider student privacy rights and work with internal policies to ensure your solution is acceptable. LEAs should ensure that policies have been communicated and expectations set for teachers and staff communicating with students and families.

Resources
Online Communication Technologies
- Google Meet
- Microsoft Teams
- Zoom
  - » Zoom FERPA Statement

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6. ESSENTIAL QUESTION: How should we communicate to staff and students about social distancing and cleaning procedures in classrooms and computer labs?

Implementation, Recommendations, and Considerations
Consider multiple ways of communicating from written, voice, and electronic messages. There should be signs posted of cleaning and use expectations along with conduct (wash hands before and after use, etc.). Consider creating a standard message for all sites to utilize as well as a template for signage. Ensuring proper communication and expectations should allow students and staff to know proper practices and encourage each other for safety.

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7. ESSENTIAL QUESTION: How do we address social distancing at schools and the district office?

Implementation, Recommendations, and Considerations
Reconfigure space to accommodate social distance parameters within classrooms, computer labs, libraries, and other high traffic areas. Also consider rotation and an alternate schedule for staff and students. Information technology and educational services will need to provide remote learning opportunities. Obtain guidelines and direction from Riverside County Public Health and work with administration and the board on expectations. Provide detailed cleaning procedures and/or training. Also, attendance should be considered.

Resources
- Riverside County Health - COVID-19

FOCUS AREA 3
Professional Development
The district and schools should have resources available in helping teachers, students, and parents in the distance environment.

Professional development for technology teams will be essential in a changing landscape. Technology professionals that were accustomed to providing services at school sites or administration buildings must now navigate themselves in a distance environment. Ensuring that the technology team is equipped will be crucial in helping staff, students, and parents navigate the use of technology.

1. ESSENTIAL QUESTION: What partners can you enlist to help create professional development for staff and students?

Implementation, Recommendations, and Considerations
There should be collaboration between educational technology, educational services, and the information technology training team. Also consider standardizing and setting up a Learning Management System which is a software application for the administration, documentation, tracking, reporting, automation, and delivery of educational courses, training programs, or learning and development programs.

LEAs should create one standard resource which will be easier for staff to utilize and information technology to maintain. A standardized system will allow stakeholders to create training resources to help staff, students, and parents.

Resources
- RCOE - Educational Technology

2. ESSENTIAL QUESTION: What kind of professional development should be provided to technology staff?

Implementation, Recommendations, and Considerations

Information technology should develop a team to provide remote support, training, and staff should utilize online training courses. It also provides resources on how to receive devices and service them. Consider bargaining agreements for training guidelines as there may be a change in the work environment. IT departments will now be interacting with a different base and may need training and understand expectations of communications with parents and students remotely.

Resources
- CDC - Cleaning and Disinfecting
- UDemy

3. ESSENTIAL QUESTION: What kind of professional development and troubleshooting tips could be provided to parents?

Implementation, Recommendations, and Considerations

IT departments now need to provide support not just to students and staff, but to parents as well. LEAs should create a web page of resources for parents so they are able to help their students. The website can include documentation, videos, and tips and tricks.

LEAs should also develop guidelines for technology staff to interact with parents and students while providing support remotely or on-site. Parent liaisons can be used to coordinate how to provide support and availability. LEAs should understand parent capabilities to support students. A survey to understand needs may be used to better create resources to help parents. Considerations in making helpdesk documentation for parents may be needed as parents are assessed for needs to support distance learning. IT departments may already have a helpdesk system and may need to include the ability to support students and parents through the system.

FOCUS AREA 4
Security and Data Privacy

The quick reaction to extending the school and work environment may have forced districts to acquire new digital resources to accommodate new demands. As districts and schools start settling into the environment, they will need to review security and data privacy. Newly acquired software will need to be vetted to ensure it meets the best interest of the district and meets their security and privacy requirements.

There has been an increase in cyber-attacks and districts now have to protect users remotely and locally. There should be training in protecting staff and students. There should also be an increased awareness of local policies in security and data privacy. As districts review their practices, revisions to board policies and administrative regulations should be taken when consideration in using new digital resources. This will help the district create expectations for use and outcomes.

1. ESSENTIAL QUESTION: Has a review of security and data privacy plans been considered in our current situation?

Implementation, Recommendations, and Considerations

IT departments should inventory all software and systems in use. After being able to review the resources being used, ensure that the terms and conditions of the use of software adhere to local policies and industry-standard practices as it pertains to security and data privacy.

LEA should establish or maintain cybersecurity training for staff to be able to understand data security and how to protect themselves and students in a distance environment. There has been an increase in bad actors and cyber-attacks which could impact LEA business.

Additional Considerations

Prior to implementation of any security protocols and privacy protocols, ensure that the LEA understands potential impacts on daily operations and make needed changes to ensure desired outcomes. Implementing new protocols may inhibit certain functions and must be addressed first to ensure that normal business and academic functions are able to still run.

Resources
- Student Data Privacy Alliance
- Center for Internet Security
- FERPA

2. ESSENTIAL QUESTION: How should we ensure the ability to check our networks and systems?

Implementation, Recommendations, and Considerations

LEAs should provide a status page of service availability to ensure that staff and students know if systems are functioning properly. Vendors and LEA systems had to scale to meet the demands of staff and students and were down at times during the transition. A status page or resource can help users know what is available. Creating a webpage that allows users to know if systems are operational is helpful in communicating with staff, students, and parents. Even as staff return, a monitoring or status page could still prove to be helpful so individuals know the status of networks and systems they may use. Most LEAs already have monitoring systems and may need to create a staff, student, and parent-friendly web page to ensure they are able to know the status of resources. The webpage should be simple, providing status on crucial systems that impact users.