School Closure Toolkit for Districts: IT Supports for Distance Learning
Updated 4/1/2020

I. Summary

During unexpected school closures, districts may explore options to continue instructional supports through distance learning options. These approaches rely on access and ease of use for both students and instructional leaders in order to be successful. This document will provide guidance and strategies to enable alternative learning pathways through the use of technology.

This document highlights:

- Ensuring students have devices or other means to engage with resources
- Developing strategies for internet access for students
- Using online tools and resources to facilitate learning

Please note that the focus of this document is the delivery mechanisms for distance learning. For information on instructional content, please see the Academics & Instruction Toolkit, available here.

For information related to this document, please contact district.technology@tn.gov or submit a request form.

Overview
Distance learning means instruction in which the student and instructor are in different locations. This may include students and teachers interacting through the use of computer and communications technology such as well as for delivering instruction or check-in times. Distance learning may include video or audio instruction in which the primary mode of communication between the student and instructor is on-line interaction, instructional television, video, telecourses, or other instruction that relies on computer or communications technology. It may also include the use of print materials incorporating assignments that are the subject of written or oral feedback. District and school staff must make decisions about the best way to support student learning during time away from school.

II. Checklist

To ensure students are able to continue in the learning process, it is critical to ensure that the technology and connectivity are available to all families for students to access the resources needed in either a self-paced learning environment or virtual classrooms. The state will support each of the districts to ensure the district plan can be enabled for all students. Plans should involve a quick landscape analysis, using instructional strategies to drive technology needs, and deployment of supports.

- ☐ **Landscape Analysis**
  To inform strategies, districts may conduct a brief analysis of available student/staff devices, internet access across communities, and currently used online resources (see *Landscape Analysis Questionnaire* in Recommended Schedules & Procedures below).
    - District technology leads establish current availability of student to device ratio, as well as staff mobile capabilities (include any existing description of protocols of take-home deployment)

- Partnering with local internet providers, establish estimate of current connectivity rates for students and staff at home
- Create consolidated list of currently used online resources, including any learning management systems or instructional programs used to supplement classroom learning

☐ **Strategy Development**

As leadership teams develop a plan for distance learning, districts should set the instructional vision for the work while considering the constraints and opportunities of technology supports. Plans should answer the following questions:

- What instructional tools are available through online or digital means around which academic teams want to build a strategy?
- What do those tools require of technology supports? (i.e.: ongoing internet access vs one-time downloads; device requirements; communications supports for teacher interactions; etc.)
- How does the current state of technology supports (from landscape analysis) meet those requirements, and what are the identified gaps?
- What resources or strategies are available to fill those gaps? (i.e.: leveraging state support, additional local partners, supplement digital with paper copies, etc.)
- What action steps are required to either fill gaps and/or how does the academic strategy need to be adjusted to account for constraints?
- What supports do students, parents, and staff need in order to implement? (i.e. online tutorial videos of how to use tools, manual guides, expectations lists, etc.)
- On what timeline can the strategy be deployed, given the need to address both content and technology supports?
- How will the strategy be communicated to stakeholders?

☐ **Deploy**

As districts launch any distance learning strategies, it will be essential to emphasize supports as stakeholders adjust to new instructional contexts.

- Communicate: Ensure each audience has targeted communications that map out explicit and easy-to-follow directions on how to access content, how to receive support/assistance, and expectations of the instructional experience. Continue to communicate regularly to provide updates and ongoing direction.
- Track: Be sure schools and technology leads have a method to track devices going home with students, as well as internet access at home if required. This will be important both for any necessary device support as well as ensuring devices are collected when normal school operations resume.
- Support Structures & Feedback Loops: Leverage IT teams, library media specialist, and other technology savvy staff to provide stakeholders with a robust system of supports. As students, parents, and staff initially engage with distance learning, they will need assistance on device supports, connectivity, and accessing content. Provide them with these contacts up front to ensure ease of the transition. These same communication mechanisms should also be used to collect feedback from stakeholders to improve the distance learning strategy over time.
- Adjust Course as Needed: Continue to discuss the distance learning strategies at leadership team meetings, adjusting the strategy or supports based on feedback from the field.

III. Best Practices

The Department of Education has been working to secure resources to make available to districts leveraging our state-wide contracts and relationships to keep the cost minimal. When moving to a virtual setting, the most critical components are working devices and ensuring connectivity for all students. Providing a consistent platform for all students and teachers will allow teacher to focus on the challenging portion of instruction during this time and in using virtual classrooms.

Devices:

- Provide consistency in the platform within a grade level. If your high schools are Windows based and lower grades are Chrome OS based, then procure devices of the same platform.
- Provide consistency in the manufacturer. Use the same manufacturer across the same grade level. Providing the teacher an air of familiarity with the devices their kids are using will make it easier for instructing virtually.
- All devices that students use should have a camera and microphone to facilitate online, interactive engagement with teachers.
- Use your mobile device management (MDM) to ensure data protection (content filtering, endpoint management).
- Inventory availability is constantly changing. If you need devices, it is imperative that you reach out immediately to begin the procurement process.

Connectivity:

- Students should have a consistent, stable connection to watch content, interact via video, and or download content. Minimum speeds should be 15MB down. There are programs from all the major hardline carriers that provide low-cost internet for low-income families. See the reference links section for more details.
- If hardline access is not an option, Mifi's, cellular USB devices, or tethering to a cellular hotspot available from all carriers also provides a stable connection. All major carriers are offering discounted plans and the State will leverage its relationships to provide loaner devices where needed. Currently, the State has relationships with Verizon Wireless and T-Mobile to provide cellular based internet access.
- ***If you need cellular devices, inventory availability is constantly changing. If you need devices, it is imperative that you reach out immediately to begin the procurement process.***
- If students cannot get internet access to their homes by either hardline or cellular, the reference links includes information from Kajeet who can provide mobile, bus-based internet hotspots for districts. The state can assist with the procurement of these devices – please email district.technology@tn.gov.
- Content filtering/security – even in a distance learning environment, it is critical to ensure student data privacy.
    - Push endpoint protection to your devices to ensure content filtering and endpoint protection
    - Guidelines for FERPA protection for applications are located here.

Virtual Classrooms:

Virtual Classrooms are an effective way to provide distance learning and keep the interaction between teacher and student. Even in the absence of a teacher's presence, there is still a need for a ***secure,*** single

point of management of available links and resources that parents can use at home to continue the learning process.

- In Tennessee, a majority of the districts have access to or use Microsoft 365 for Education or G Suite for Education by Google. Both provide secure platforms for hosting virtual classrooms and extending into a managed or self-paced distance learning model.
- During this time, if you do not have a current platform you use on a regular basis or if you are already a Microsoft tenant, the District Technology team will either assist in the setup of your Microsoft tenant or host your district on the State's instance of Microsoft 365.
- The Microsoft Office 365 for Education platform is available to districts and free for students.
- The State Technology team is working with Microsoft to provide support for all districts to be setup in this virtual learning environment, if they chose.

Virtual and digital learning models rely on the use of traditional and online curriculum materials and resources delivered through the technology tools that are chosen to facilitate or enhance the learning process. When we consider meaningful student engagement through virtual means, it is important to be thinking through when and through what method will students and their parents be informed of lesson content, lesson activities, and expectations for the demonstration of student mastery.

Working with Microsoft, the department can provision Microsoft Teams to enable virtual classrooms for learning. This virtual classroom model is active in a number of states and can be structured to meet the needs of districts.

- The Department of Education can auto-create the Teacher/Student relationships into a Microsoft "Class." This functionality can be created inside of the Teams application using EIS, so that the platform creates "classrooms" inside of "schools." This feature will give teachers access to the tools available, including assignment creation, grading, teacher / student communications via text and video chat capabilities within the application.
- Microsoft Teams also allows for monitoring of student activity within the virtual classroom to ensure students are participating and actively working on their assignments.

Several school districts are utilizing web pages, Twitter, and other open resources to communicate with students. Please remember that we still want to provide the same level of safety and security as much as possible in a self-paced and/or distance learning environment. If you are unsure about the security of the platforms you are using, ask your district technology Director, or email the District Technology Helpdesk at district.technolgoy@tn.gov. We have resources that can aid in the ***safe and secure*** transmission of information.

IV. Recommended Schedules & Procedures

1. Landscape Analysis Questionnaire
2. 5 Day Guide to Virtual Classroom Launch

Landscape Analysis Questionnaire

District leads may use the following questionnaire to help map out available resources and needs across devices, connectivity, and resources in order to plan and implement distance learning strategies. The below information will help inform local decisions by highlighting key gaps. Please contact the department's Technology team for assistance in addressing gaps, either through strategy assistance or direct supports.

Devices:

☐ Are you currently a 1:1 district/school?

☐ If not 1:1, how many students would you need to provide a device for?

☐ What platforms do you use at each grade level?

☐ How many of your students have a dedicated device (tablet or laptop) at home that they can use, if they are not provided a device by the school or district?

☐ How many students do not have a dedicated device (tablet or laptop)?

☐ Do you have a current hardware contract for devices?

☐ Have you spoken with your current reseller about inventory availability?

☐ What method do you currently use for content filtering/endpoint protection?

☐ Do you need assistance from the state in deploying devices to students?

☐ Do you have a current asset tracking system?

☐ Do you have tools for remote tech support (Webex, etc) if needed?

Connectivity:

☐ Approx. what % of students do not have internet access at home?

☐ Check wireless coverage in your area here. Is your entire district covered?

☐ Who are the fiber/cable internet provider(s) in your district?

☐ How do you do content filtering today?

☐ Do you need assistance from the state in procuring/deploying products?

Distance Learning Resources

☐ Do students have devices and connectivity to the Internet?

☐ Do you currently promote or enable the use of online learning tools (i.e. IXL, Accelerated Reader, etc.) for students to use at home?

☐ Do you currently have an online learning platform (i.e. Microsoft 365 for Education or G Suite for Education)?

***If you do not have a current online learning platform, the State is recommending the use of the Microsoft 365 for Education suite. If you have a Microsoft 365 tenant in place, please continue with the checklist below:

☐ Have you enabled Microsoft Teams?

☐ Are you currently syncing your SIS (Student Information Systems) data to your Microsoft 365 tenant?

☐ Have you trained staff and teachers?

☐ Have you sent out the Teams login information to students?

☐ Have you turned on Class Insights within Microsoft Teams?

5 Day Guide to Virtual Classroom Launch

Regardless of platform, there are some general guidelines to follow when setting up virtual classrooms for all teachers.

Enabling remote learning in 5-days guidelines:

- Phase 1 (Day 1-2)
  - Step 1: Establish a core team of educator leaders to determine a timeline and current needs
  - Step 2: Set up your virtual/online learning platform.
  - Step 3: Establish communication cadence with students, parents, and guardians

- Phase 2 (Day 3-4)
  - Step 4: Create staff teams and deliver online tool training
  - Step 5: Educators can set up and structure their class teams
  - Step 6: Prepare students and families with resources pushed through your virtual classroom tool. Set clear expectations for how students should structure their virtual classroom day.

- Phase 3 (Day 5+)
  - Step 7: Establish schedules and online community spaces.
  - Step 8: Add data views to class teams
  - Step 9: Ongoing professional development, collaboration, and other training

V. Resource List

Connectivity/Devices (Click on the option to link for more information)

- Hardline Carriers (Low-Cost options for eligible families)
  - Comcast Internet Essentials
  - Spectrum Internet Assist
  - Access from AT&T
- WiFi Internet accessibility:
  - Verizon Wireless and/or T-Mobile (District Technology HelpDesk Form)
    - Verizon Wireless: Verizon Wireless is currently under state contract, and devices are $0 cost. Service cost is ~$35/month/device for high utilization and $24/month/device for low utilization.
    - T-Mobile: There is currently a $0 cost for devices and a $35/month per user for unlimited bandwidth.
  - Kajeet – Bus Mobile Hotspot solutions
- Computing Devices (Laptops/Desktops) – for assistance with procuring devices – please contact District.technology@tn.gov or complete the DT Helpdesk form.
  - The department is currently working with Dell, Microsoft, and SHI as a reseller to provide low-cost options across manufacturers. The average cost for devices will be between $100-$149 per device.
  - Comcast also has devices for sale under their Internet Essentials program. More information can be found here.

Virtual Classroom:

Security:

- Guide to FERPA
- FERPA and Virtual Learning Presentation
- FERPA and Virtual Learning Presentation Recording

Setup:

- Get started with Microsoft Teams for remote learning
- Teams for Education quickstart guide
- Teams EDU Remote Learning Webinars
- Technical Support for Teams
- School Data Sync

Parent/Family Support:

- Parent Support for Distance Learning
- Distance Learning for Families

Step-by-Step Presentation:

- Getting setup for Distance Learning in 5 days (ppt)

Need more help: Contact district.technology@tn.gov or submit a request form.