

Readiness and Emergency Management for Schools (REMS) Technical Assistance (TA) Center

Supporting Continuity of Teaching and Learning During an Emergency

Continuity of learning is the continuation of education in the event of a prolonged school closure or student absence. It is a critical component of school emergency management, as it promotes the continuation of teaching and learning despite circumstances that interrupt normal school attendance for one or more students. However, many considerations play a role in the development of distance learning programs, such as accessibility, type and quality of materials, and the length of time that this type of learning must be maintained. There are also a variety of potentially viable distance learning methods. The following considerations, information, and resources can support schools and districts as they make plans for continuity of learning in the event of a school closure or student absence.

CONTINUITY OF LEARNING KEY CONSIDERATIONS

Designing for Different Age Groups. Instructional design, course design and plans for support must be aligned with the skill level of age groups. For example, those serving the elementary and middle-school levels might have to consider creating instructional materials for both students and parents, while high school students are likely more capable independent learners.

Supporting System Training. Training is necessary for faculty, staff, students, and parents on the use of continuity of learning systems to ensure true continuity and accessibility.

Ensuring Accessibility. Not all students may have access to the Internet, phone lines, TV or radio at the same time, or at all, during a prolonged school closure or student absence. Therefore, it is important to offer a variety of methods of distance learning. You must also consider Section 508 of the American Disabilities Act, which provides accessibility guidelines for individuals with disabilities. This means that all materials must be provided in alternative formats, when necessary.

Preparing for Short- and Long-Term School Closures. Tools that might be useful during the short-term might not work for long-term closures. School emergency management and continuity planning teams must assess which tools work best for their schools and/or districts based on the anticipated length of closure, current resources available, student access, and grade level.

State Policies on Online Learning. Many states have established policies regarding online learning. As schools and districts develop continuity of learning and education plans, they should be sure to consult their respective state policies to ensure their plans are aligned.

QUESTIONS TO CONSIDER WHEN PLANNING FOR CONTINUITY OF LEARNING

- *What technologies do we already have available?*
- *What training materials will we need to create? And for what audiences?*
- *What individuals will be involved in the training and tutoring process on technologies and systems selected?*
- *What role does cost play in determining short- and long-term solutions?*

EDUCATOR TOOLS TO SUPPORT CONTINUITY OF LEARNING

The following list includes a range of tools and modalities for facilitating distance learning, including those with no, some, or great levels of technological sophistication. As discussed, it is important to consider a variety of methods to allow for the possibility of restricted access to technology and limited communication by students.

Printed Materials: *Textbooks, photocopies of reference materials, curriculum, and assignments can be prepared in advance for distribution to affected students.*

Instructional Packets. In advance of a prolonged school closure or student absence, teachers can prepare hard copy instructional packets that students may use at home to continue their learning. Many schools and teachers already prepare these types of packets for summer assignments. Hard copy packets may include worksheets; calendars or schedules of work to be completed; directions for homework, projects, or written assignments; excerpts from textbooks or other reading materials; and sample assessments. Teachers may take two different approaches when developing packets, according to how much advanced notice they have before a school closure or prolonged student absence: (1) Generic packets that can be used at any point in the school year that promote student learning according to grade-level and subject-specific standards, or (2) Unit-specific packets that are based on the planned curriculum, and integrate with the lessons that students are currently learning in class. In comparison to online instructional tools, hard copy packets have the benefit of not requiring technology for use.

Practice In Action

The New York City Department of Education offers [Learn at Home Instructional Activities](#) that represent the type of instructional material that may be appropriate for generic packets.

Teacher Check-ins and Tutorials: *A variety of technologies (telephone, email, web conferencing) can be used to facilitate one-on-one, or teacher-and-class interaction or lesson delivery between students and teachers, counselors and other appointed adults (e.g., tutors) during prolonged absences or dismissals.*

Telephone and Video Calling. School leaders can use existing conference call lines or set up lines in advance to continue communication with teachers. Teachers can also use these lines to hold group and individual discussions, or even teach lessons, with students in a secure and private setting. Administrators can use telephone and video calling to support the distribution of notifications and to provide information to students, faculty, and staff during a prolonged closure.

Email. Schools and school districts can use their existing email service provider to send, receive, and track messages. In the event this service provider is not operating, response teams can use other online systems that allow quick distribution of multimedia content to a mass audience. There are a variety of free email services providers on the Web, including Google, Yahoo, and Hotmail, most of which support document sharing, scheduling, and web chats.

Web Conferencing. A variety of free web conferencing services are available on the web. Schools and school districts can consider setting up an account for use in cases of emergency, when distance learning methods are needed, and may want to conduct mock conferences using one of these services for ease of use in the event of an emergency.

Social Media. Many students, parents, faculty, and staff use social media on a daily basis for personal use, but it can also serve as a vehicle to send announcements about lessons, grade uploads, teacher absences, and other information related to continuity of education. Social media can be useful during both short- and long-term closures, particularly because they are easy to access on different devices, including cell phones, tablets, and computers. Some schools may have existing accounts with social media sites. Twitter, Facebook, LinkedIn, and Instagram are all examples of free social media sites schools can use.

Wiki Sites. A wiki site is a Web-based application that supports data collection, information sharing, and content revision in a collaborative platform. Participants in a wiki can add, delete, revise, or review content in cooperation with others. Teachers might find these spaces useful, as they can store classroom lessons, grade papers, and communicate with students via wiki sites. Further, teachers can promote student collaborative learning with wiki sites by instructive students to use such sites for projects. Some providers, such as Wikispaces, even offer platforms for school districts to create a “campus” space in which they can track the information different schools house and share with students, faculty, staff, and parents.

Recorded class meetings: *Using audio or video technology, recorded class meetings can be given to some or all absent students via podcasts, live or on-demand television, DVD, captioned closed-circuit or public access television, or online.*

Public Broadcast Television Stations and Radio. In times of large-scale school closures or emergencies, schools may have the option of partnering with local and public access television and radio stations to communicate with students and families. These transmissions can provide distance learning lessons in themselves, or information on how distance learning will continue (i.e. referrals to other systems or resources).

Practice In Action

In 2009, the Wisconsin Educational Communications Board developed a continuity of education initiative for possible school closures from the H1N1 virus. Instructional programming was broadcast daily on local TV and recommended as part of a continuing education program. More information about this initiative is available in the following [announcement](#).

Digital Audio Recorders. Teachers can use these devices to record segments of courses for electronic distribution to students (e.g., as email attachments, through file sharing technology, or even as a podcast). Alternatively, digital audio recordings could be burned to CDs or DVDs if not all students have Internet accessibility outside of school.

Online materials or other aligned content: *Digital copies of textbooks, reference materials, assignments, and audio-visual learning supports can be made available on the Internet using online learning platforms and web sites (e.g., school websites).*

Slide Presentation Software. PowerPoint and other similar desktop-based software applications can be used to hold lesson content, audio recordings, and hyperlinks, in the event that students have access to the Internet. If students don't have access to the Internet or computer speakers, teachers can distribute supplemental materials and go over lessons over the phone.

School-specific Websites or Blogs. In the event of an emergency, a website or blog could serve as the main information center for a school or classroom. Educators could use websites or blogs to disseminate assignments and assessments to students, as well as to facilitate discussions among students. If such functions are normally enabled by a Learning Management System (e.g., Blackboard), a more basic website or blog could serve as a back-up service in the event that a school or district's server goes down and the Learning Management System hosted by that server is unavailable. The website or blog link could be distributed to students, faculty, staff, and parents via email, telephone, social media or any other selected communication medium. There are many free blog service providers available on the Web that

require limited technological expertise, and/or the school's own website could serve as a well-known source for this type of information dissemination.

Learning Management Systems. These robust systems allow teachers to share and store numerous instructional materials, including assignments, worksheets, calendars, and assessments; track student progress and grade work; send messages and notifications to students; facilitate discussions with students using blogs and/or discussion boards; conduct online class meetings; and much more. Your school or district may already have a Learning Management System in place that can be utilized in the event of an emergency. Blackboard, SharePoint, and Moodle are all commonly used LMS.

Open Websites Offering Free Instructional Materials.

Many organizations offer free instructional materials on their websites that support teaching and learning. Often aligned with the Common Core State Standards, these readily accessible online materials may be helpful in the event of a prolonged school closure if teachers and students do not have access to classroom materials.

Websites with Free Instructional Materials

- [PBS Learning Media](#)
- [National Geographic Education](#)
- [Smithsonian Education](#)
- [National Education Association Lesson Plans](#)

Free Online Courses for K-12 Students

- [Khan Academy](#)
- [EdX](#)
- [Canvas Network](#)

Massive Open Online Course (MOOC). These open-access and Web-based courses provide users with an interactive and immediate learning experience that is focused on group collaboration and automated feedback. Along with viewing and hearing learning content, users can participate in discussion forums and take assessments. There is no limit on user participation and many of the MOOCs available online are free.

ADDITIONAL RESOURCES

The following resources offer examples of continuity of learning in action—these schools, districts, and organizations showcase some of the methods, strategies, and guidelines for distance learning discussed above.

- **Toolkit on Developing Resources for Continuity of Education.** The Los Angeles County Office of Education developed an informational publication, [Emergency Preparedness: Continuity of Instruction Resources](#), presenting information and resources that schools and

districts can use in planning for continuity of instruction in the event of a pandemic or other emergency resulting in significant student and staff absences or school closure.

- The **International Association for K-12 Online Learning (iNACOL)** is a non-profit organization dedicated to promoting access to quality online and blended learning opportunities. They have a Web page dedicated to [Continuity of Learning](#), which provides information on curriculum, audience, technology, and strategies, as well as an example of how continuity of learning may occur during a school closure.
- [The Oregon Virtual School District](#) is a program led and funded by the Oregon Department of Education that serves K-12 educators. This entity provides resources and support to public school teachers in integrating technology in their classrooms, including a repositories of lesson plans, videos, podcasts, and resources for educators; professional development and training for educators through courses, tutorials, and webinars on distance learning and software learning platforms; and technical support for educators in creating and managing classroom websites and software learning platforms.