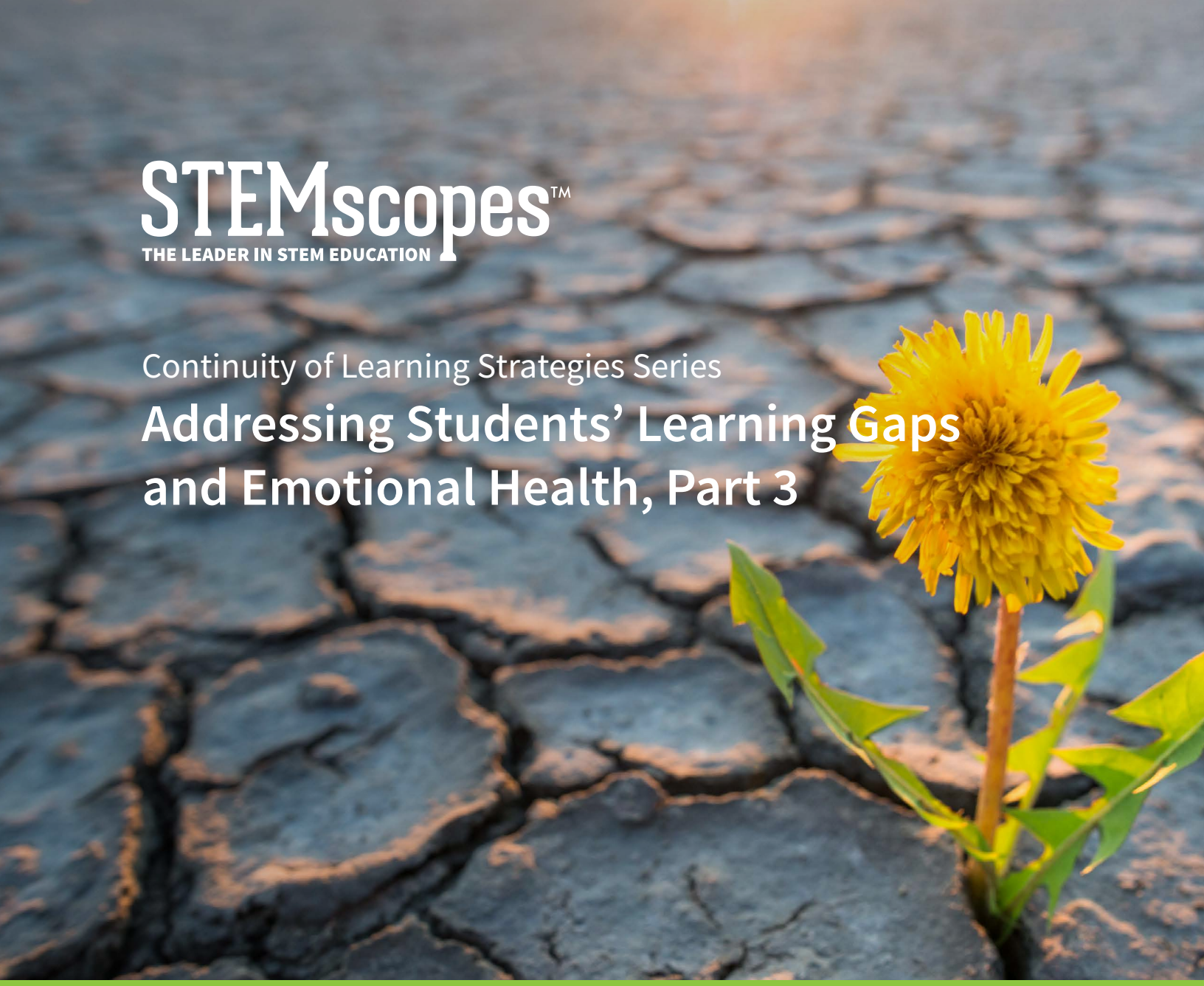


STEMscopes™
THE LEADER IN STEM EDUCATION

Continuity of Learning Strategies Series

Addressing Students' Learning Gaps and Emotional Health, Part 3

The first guide in this Continuity of Learning series explained strategies for adapting course and instructional design for remote learning. The second guide shared the underlying strategies and tools needed to facilitate the delivery of instruction.

This final guide discusses how to prevent students' learning loss and address existing learning gaps. It shares ways to help students focus on learning despite the disruptions in their lives and routines.

Instructional Practices to Address Learning Gaps

The good news is that remediating learning gaps and staving off potential learning "slides" while teaching remotely is possible. Even though online environments may be unfamiliar or uncomfortable, teachers do not have to resort to a one-size-fits-all approach.

Teachers can use established practices along with tools like online videos, curriculum programs, digital platforms, Learning Management Systems (LMS), and even thoughtfully chosen books to tailor remote instruction to students' specific needs.

- **Differentiated instruction**
  In differentiated instruction, teachers tailor their lesson content, teaching strategies, materials, and the classroom environment to different students' needs. When digital tools like curriculum programs provide intervention and acceleration lessons, teachers have a head start with the first three factors. Some programs even support differentiated instruction for young learners, including children as young as three years old. Additionally, digital platforms usually allow teachers to create or customize tests, enabling those teachers to assess the progress of very specific groups of students.

Even the last factor (classroom environment) can be replicated remotely by making students feel valued, engaged, and challenged, and helping them see meaning in what they're learning.

Differentiated instruction practices that are easily adapted to remote instruction include the following:

- Learning centers
- Flexible grouping
- Adjusting questions to specific students' cognitive skill level per the Bloom's Taxonomy
- Independent study

Many digital tools offer ready-made activities such as digital and paper-based games, spiraled review (skills practice), videos for discussion, activities that reinforce math or literacy skills through other subjects, and more. These activities allow for online learning centers and flexible grouping. For example, most of a class can use the activities to continue learning while teachers make time for small group interventions and reteaching.

Independent study can take the form of independent projects and practice activities. Platforms will often have activities that students can complete individually. Teachers can facilitate independent learning, whether online or in print, by pushing out instructions and resources. For example, when students watch instructional videos on their own, teachers can provide them with organizers to help capture key ideas. Teachers can later debrief the video (or other activity) to check for misperceptions and elevate student understanding during synchronous learning sessions.

Both projects and practice activities can be enrichment for students who have demonstrated mastery in current lessons. While they complete practice activities independently, teachers could do those same activities with small groups of students in need of support and remediation. Likewise, a teacher can have some students review concepts independently (e.g., through games) while the teacher works synchronously with other students.

Students needing remedial studies can also benefit from independent study. Resources from lower grade levels can be used to provide scaffolding so that students can independently complete activities in a meaningful manner.

- **Individual and small group instruction**
  As previously mentioned, teachers can have most of a class focus on a video or complete group activities while the teacher works with an individual student or small group. Also, since experts recommend set amounts of time for online synchronous (direct teacher-student interaction) classes, teachers can also create assignments to be completed asynchronously (without their teacher present online). This will require anticipating students' needs and making instructions as clear as possible.

  Individual learning practices can include the following:
  - Assigning hands-on activities that a student can do at home with readily available materials
  - Facilitating sensemaking via independent thinking, reading, and research
  - Providing opportunities to self-assess and autonomously choose between independent remediation or enrichment activities
  - Having a student watch or read a video or activity about a current event and then answer questions independently as homework, extra credit, or enrichment
  - Using guided practice activities as intervention to help a student revisit an idea in another way (share instructions in a PDF with parents so they can help the student)

  Some of the tasks listed above can be assigned to small groups as well (with teachers monitoring the groups as they work in online breakout rooms). For instance, if they watch a video, students can answer related questions in small groups during asynchronous time instead of working independently.

  Guided practice can also work as small group instruction for students in need of extra support and remediation. These may involve hands-on activities that are possible for students to complete with materials they have at home while their teacher supports them. Teachers can also provide those students with guiding questions that reinforce the key concepts being taught.

  Some activities won't need teacher oversight until they're completed. For example, students can conduct research either individually or in small groups without direct teacher support. Likewise, teachers can assign assessment questions to be completed independently or in small groups during asynchronous time.

- **Curriculum support features**
  A variety of curriculum support features are available to help teachers prevent or reduce learning gaps. Below are some examples:
  - Leveled reading materials
  - Reinforcement of math and literacy skills within lesson content for other subjects
  - Text-to-speech "read aloud" function
  - "Just in time" vocabulary support
  - Video libraries
  - Virtual classes from within a digital platform or LMS
  - Picture vocabulary in English and Spanish

  Additionally, educators can repurpose end-of-year assessments to determine learning gaps and address any learning slides taking place. Many vendors sell summative evaluation packages that educators can use to identify what students mastered and areas for improvement.

Helping Students Manage Their Emotions During Disruptions

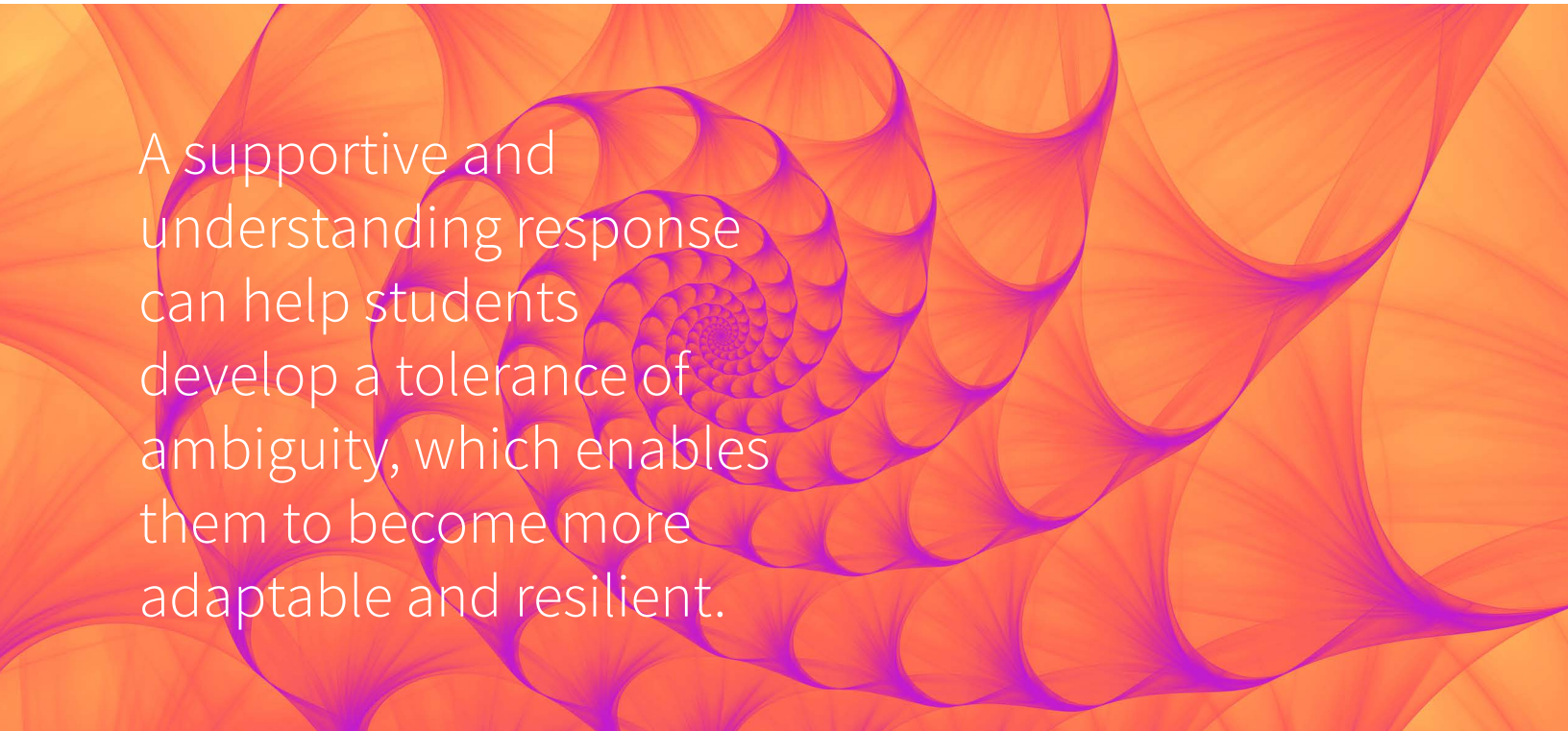
Incidents severe enough to cause school closings (e.g., natural disasters) can also cause people to have anxiety symptoms (e.g., hypervigilance), stress, or cognitive disruptions (e.g., confusion or poor memory). The loss of routine and structure brought about by suddenly being taken out of school can also lower students' ability to focus on coursework. Additionally, some students may be dealing with difficult personal circumstances (e.g., a caregiver becoming unemployed or a severely damaged/destroyed home).

A supportive and understanding response can help students develop a tolerance of ambiguity, which enables them to become more adaptable and resilient. So, if teachers explain that students' anxiety and fears are normal reactions, most of those students will be better able to adjust to their new situation. Teachers who have been incorporating social-emotional learning practices into their instruction should continue those practices as much as possible during prolonged closures.

Teachers need to provide students with structure as well as clear and regular communication about what is expected of them. Structure will most likely be in the form of regularly scheduled online classes, which create a sense of routine and normalcy for students. Adjusting rituals and activities that had been part of the classroom routine to the new distance learning environment can also support that feeling of normalcy.

As mentioned above, educators should take care to articulate their expectations of students. This can be done verbally, and if possible, via a central repository of information. Regular communication ensures that students don't forget what they're supposed to be doing academically (e.g., details about project assignments) or behaviorally (e.g., class rules for speaking or using the chat function during a video conference).

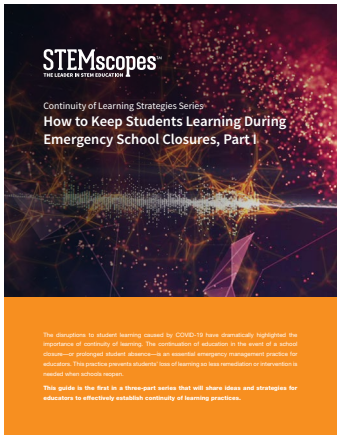
Regular, timely, and effective communication is essential to addressing students' emotional needs. When they feel that their teachers and other educators are there for them, students tend to feel less "lost." If video calling is not possible, telephone calls to provide students and their families with notifications can help them feel less isolated and anxious.



Confidence is Preparation

Suddenly having to switch from the physical classroom to distance learning can be deeply unsettling for both educators and students. No two crises will be the same, and it's normal to feel overwhelmed or apprehensive when they hit. But preparing beforehand (such as reviewing and applying the strategies, tools, and resources described in this series of guides) will enable educators to take action with a certain degree of confidence.

Previous Series Installments



If you haven't done so already, we invite you to look at the first two parts of our *Continuity of Learning Strategies Series.*

- The first part, "How to Keep Students Learning During Emergency School Closures," focused on instructional design that allows for seamless switching from in-class instruction to remote learning and back again. You can find it here.
- The second installment, "Support Tools and Strategies Needed for Practical Implementation," discussed the underlying strategies and tools that allow for a smooth transition to distance learning. You can find it at here.

About Accelerate Learning

Accelerate Learning works with more than 200 practicing teachers who help Accelerate Learning write curriculum, field test lessons and assessment items, and review and edit all materials to ensure factual accuracy, so our curriculum is current and practical for implementation in any type of classroom.

Accelerate Learning Inc.
5177 Richmond Ave., Suite 1025
Houston, TX 77056
Phone: 800.531.0864