

Restarting and Reinventing School: Learning in the Time of COVID and Beyond

Priority 2: Strengthen Distance and Blended Learning

Linda Darling-Hammond, Adam K. Edgerton, Natalie Truong, and Peter W. Cookson Jr.

Across the United States, state education agencies and school districts face daunting challenges and difficult decisions for restarting schools as the COVID-19 pandemic continues. As state and district leaders prepare for what schooling will look like in 2020 and beyond, there is an opportunity to identify evidence-based policies and practices that will enable them to seize this moment to rethink school in ways that can transform learning opportunities for students and teachers alike.

Our current system took shape almost exactly a century ago, when school designs and funding were established to implement mass education on an assembly-line model organized to prepare students for their “places in life”—judgments that were enacted within contexts of deep-seated racial, ethnic, economic, and cultural prejudices. In a historical moment when we have more knowledge about [human development and learning](#), when society and the economy demand a more [challenging set of skills](#), and when—at least in our rhetoric—there is a greater [social commitment to equitable education](#), it is time to use the huge disruptions caused by this pandemic to reinvent our systems of education. The question is: How can we harness these understandings as we necessarily redesign school? How can we transform what has not been working for children and for our society into a future that carries us forward into a more equitable future?

This section is part of a larger report, *Restarting and Reinventing School: Learning in the Time of COVID and Beyond*, that focuses on how policymakers as well as educators can support equitable, effective teaching and learning regardless of the medium through which that takes place. The full report provides an overarching framework to inform the restart of schools while also providing a long-term vision that can guide leaders toward new and enduring ways to address educational quality and inequity. It illustrates how policymakers and educators can:

1. Close the digital divide
2. Strengthen distance and blended learning
3. Assess what students need
4. Ensure supports for social and emotional learning
5. Redesign schools for stronger relationships
6. Emphasize authentic, culturally responsive learning
7. Provide expanded learning time
8. Establish community schools and wraparound supports
9. Prepare educators for reinventing schools
10. Leverage more adequate and equitable school funding

This section provides research, state and local examples, and policy recommendations for how policymakers and educators can strengthen distance and blended learning. For the full report, go to <http://learningpolicyinstitute.org/product/restarting-reinventing-school-covid>.

Priority 2: Strengthen Distance and Blended Learning

Once all students have access to high-speed internet and to devices adequate for managing school work, the challenge of implementing high-quality distance learning and blended learning models remains. Hybrid and [blended learning models](#) can facilitate continuity of learning by enabling teaching and learning to occur both in person and online on an as-needed basis. The key goal is that “the modalities along each student’s learning path within a course or subject are connected to provide an integrated learning experience.”¹ Furthermore, [student-centered blended learning models](#) that tap new uses of technology across home and school spaces can, when they guide purposeful use of teacher time, increase equity in learning while offering productive models in this new environment.

What Students Need

Most students will not have access to school buildings for a full 5 days a week this fall. Some will still be engaged in distance learning because of their personal health considerations or until infection rates recede in their community. Others will be in school on alternating days or weeks to allow for social distancing, as [recent guidance from the CDC](#) acknowledges. In models in which students are in school only part of the time to allow for social distancing—or alternating on Zoom between synchronous and asynchronous activities—the time in class may be used to introduce new concepts and information to the group and to get students started on the inquiries they will use to further explore or apply that information. Then students may continue those inquiries when they are in asynchronous or distance learning mode by applying newly learned skills; collecting data or evidence; completing additional reading and written reflection; working virtually with a small group to complete tasks; and preparing to present their ideas, findings, solutions, conjectures, or conclusions when they return to a full-class setting, either in person or online. In-school and out-of-school learning needs to be connected and seamless, with the tasks chosen to take advantage of the different settings in which learning is taking place.

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What Policymakers and Educators Can Do

While distance and blended learning models may be an entirely new experience for the majority of k–12 schools in the United States, there is a growing body of evidence about what works in these contexts that can be replicated across contexts.

Share pioneering efforts among districts

While this new era may feel like uncharted educational waters, educators can be guided in part by successful pioneers and by principles rooted in equity and authentic learning. Among the blended learning pioneers is the **Miami-Dade County Public School District** in Florida, where recurring hurricanes and flooding have long required a [comprehensive distance learning strategy](#). The Miami-Dade County approach includes an [instructional continuity plan](#) with curriculum

designs, plans for access to devices and connectivity, and supports for parents and teachers that are activated whenever needed to ensure that instruction continues seamlessly. Along with extensive professional development, among the resources the district offers teachers are videos of expert teachers, “[Distance Learning Champions](#),” illustrating and discussing their lessons and approaches.

Lindsay Unified School District in California has offered a performance-based learning system over the past 5 years that [leverages technology and blended learning](#) as a tool to deliver learning approaches that are learner-centered, inquiry-based, personalized to learner interests, offered at a differentiated pace with multiple means to demonstrate knowledge, balanced between online and in-person settings, and engaged in formative feedback to inform instruction daily.

With personalized, competency-based learning and blended learning implemented, Lindsay Unified was able to [transition seamlessly to distance learning](#) during the pandemic. This was made possible because in 2015, the district designed and implemented a free Community Wi-Fi program. Today, all of Lindsay Unified’s students and their parents can access filtered internet from their homes, free of charge. This program was not grant-funded or financed externally. Instead, the district repurposed budgets and avoided textbook adoptions to invest in digital formats and systems that support equity and all learners’ needs.

According to a recent study, [Building Solid Evidence—It’s Working at Lindsay Unified](#), this school district that serves 91% students from low-income families and 41% English learners has maintained a 97% attendance rate for the past 5 years and a 94% graduation rate. Over the past 5 years, Lindsay Unified students’ proficiency rates have increased from 26% to 47% on the state’s Smarter Balanced Assessment Consortium assessment in English language arts, moving the district from the 33rd percentile to the 87th percentile among similar school districts in California.

As noted in the examples below and the resources provided, there are many pioneering districts across the country that can help others think about how to undertake these new challenges well.

Support high-quality distance and blended learning models with educator training and materials

To be effective, online learning should be much more than the teacher talking and the students listening through another medium. It should be as interactive and authentic as possible, combining live interaction among students and teachers with interactive multimedia materials that support well-designed assignments and projects that students may complete at home. A recent synthesis of research on computer-supported distance learning,² reinforced by other research,³ found that:

- **Well-designed online or blended instruction can be as or more effective than in-classroom learning alone.** While many worry that distance learning is necessarily less effective than in-person learning, many studies show that well-designed distance learning that has the features described below is generally more effective than traditional in-classroom learning alone. (One caveat is that most studies are of students in the upper elementary grades and older; less is known about distance learning for young children.)
- **Synchronous and asynchronous instruction should be combined in strategic ways.** Combining synchronous activities in which students meet online or in person with their teachers and classmates with asynchronous activities in which students engage deeply with both the subject matter and groups of peers is more effective than fully synchronous online courses.

- **Student control in how to engage with asynchronous online elements enhances learning.** Students do better when they can go at their own pace, on their own time, when they have some choice over their learning strategies, and when materials enable them to engage deeply and critically with course content. For example, in one study, students who were allowed to watch assigned videos in any order, and fast-forward, rewind, and replay them, significantly outperformed those who had to use the videos in a predetermined standardized fashion. Similarly, student control over when and how to use other learning materials enhances their motivation and performance.
- **Frequent, direct, and meaningful interaction is critical.** The more intense the interaction among students, teachers, and interactive content, the deeper the learning. In online learning environments in which there is little student–student, student–instructor, and student–content interaction, students are more likely to become disengaged and are at higher risk of dropping out. Fully online courses with little high-quality interaction also contribute to gaps in educational success across socioeconomic groups.
- **Interaction should focus on solving problems and developing ideas.** Opportunities for students to engage in interdependent cooperative learning are important. This includes group engagement in shared projects and presentations as well as opportunities to interact with peers and the teacher in multiple formats. For example, whole-group and small-group discussion in synchronous instruction (for example, in Zoom breakout rooms), chat rooms and discussion boards that may be synchronous or asynchronous, and quick polls and votes followed by debate and discussion are all means to improve engagement and create positive effects on learning gains, as are interactive materials.
- **Interactive materials are extremely important.** High-quality distance learning should not rest on static textbooks or worksheets but on the use of interactive multimedia materials, typically during asynchronous learning. For example, 8th-grade students whose teachers integrated the use of the Pathways to Freedom Electronic Field Trips—an online collection of interactive activities designed by Maryland Public Television—in their teaching about slavery and the Underground Railroad outperformed those who had the same unit without these materials. Fifth-grade science students in Taiwan who used a virtual web-based science lab, which allowed them to conduct virtual experiments while teachers observed student work and corrected errors online, outperformed those who did an in-person manual science lab. Elementary special education students across five urban schools who used a web-based program that supports writing in action (by prompting attention to the topical organization and structure of ideas during the planning and composing phases of writing) outperformed those who had the same materials in hard copy in the classroom.

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- **Opportunities for formative feedback, reflection, and revision strongly enhance learning.** For example, students performed better when they used a formative online self-assessment strategy that gave them feedback when they answered an item incorrectly: They were told that their response was not correct, and they were given additional resources to explore to find the correct answer. (They were not given the right answer.) Students who received quizzes that allowed them the opportunity for additional practice on items they answered incorrectly did better over time than those who received quizzes identifying only right and wrong answers. Studies have found positive effects on online learning of a variety of reflection tools, ranging from prompts asking students to reflect on their problem-solving activities to prompts asking them to provide explanations regarding their work; student reflection exercises during and after online learning activities; and learning guidance systems that ask questions as students design studies or conduct other activities that support their thinking processes without offering direct answers.
- **Self-management strategies should be explicitly taught.** Students who receive instruction in self-regulation learning strategies, such as managing study time, goal-setting, and self-evaluation, perform better in online learning. One tool found to promote success was a form on which students could record their study time and environment, note their learning process, predict their test scores, and create a self-evaluation.

Successful online teachers [describe how these principles come alive](#) in their practices and can be sources of professional development for other teachers. For example, teacher John McCarthy notes how important it is to:

1. **Establish structures for self-regulation and interaction.** Many students need help managing work time and productivity when adapting to a virtual environment. Provide checklists that are readily available to students and parents that break out the steps for task completion to help them understand the scope of the work and the milestones they'll accomplish along the way. Do check-ins to monitor progress on checklists and collect assessment data on students' growth. Include discussion boards and/or links to external dialog tools such as [Flipgrid](#), and encourage students to discuss, review, and post links and other content that supports their learning.
2. **Provide choice and control by offering a variety of assignment or task formats.** Rather than assigning only worksheets or reading questions, which often leads to frustration and disengagement, offer students different approaches so they can build and apply knowledge. For example, provide a recorded lecture, two or three videos, and two readings about the topic. The students must listen to the lecture and then choose to complete a combination of the remaining content options. Provide links to reading assignments at different reading levels so that all students find a path to comprehension, with tools such as [Newsela](#), [Rewordify](#), [News in Levels](#), and [more](#). Give two or three choices for completing a task, such as writing; recording a video; building a slide deck; or using Minecraft Education to demonstrate math concepts, historical events, and literary ideas. Allow students to upload their work onto the classroom learning platform to share with peers.

3. **Keep it real.** Make the content relevant to authentic purposes outside of school. Connect assignments to career-related tasks, such as business plans, lab experiments, survey statistics, or recorded presentations. Identify an audience from the community whose occupation applies the concepts being taught, or give students a target audience for the tasks they are doing.
4. **Make work public.** Curate and publish student work for viewing by a [target audience](#), such as the local community or organizations that might benefit from or appreciate a different perspective. Students who contribute to their communities see that their voice matters, and being published shows them the value of their evaluation and synthesis of curriculum. Work can also be shared with others in the classroom—as in book reviews to inform peers or presentations of work to others in the school. Learners tend to take more care with their work when the intent is to share with an audience beyond the teacher.

Teacher and professional development provider Kathryn Welby describes [how to structure distance learning to support students with individualized education plans \(IEPs\)](#), including how to:

- engage parents, set goals, and support them in supporting their child;
- create synchronous activities that are doable, engaging, fun, and productive; and
- create asynchronous supports including visuals, schedules, routines, movement breaks, and effective tools and materials, as well as a range of ways for students to show their learning.

Give special consideration to early childhood learning

Because very young children are also now learning from home, there is a danger that the digital divide might be baked in at an early age. Edutopia has published [distance learning principles](#) for educators to use in working with very young learners and their caregivers that offer a systematic approach meant to empower all families by:

- modeling everything that is being taught;
- speaking directly to caregivers about how they can support their young learners;
- ensuring equity by tailoring tasks and supports to families' needs and capacities; and
- creating a collaborative community among the families who are part of the class.

Early childhood and the early grades (pre-k through 3rd grade) is a unique developmental period that requires a different approach when conceptualizing and supporting distance learning than the upper grades. Despite this, few states required districts to give special consideration to the [unique needs of distance learning for pre-k through 3rd-grade students](#). The [National P-3 Center](#) has identified the following principles to guide districts' and schools' at-home learning supports for pre-k through 3rd-grade students based upon fundamentals of child development and equity:

- Focus on relationships and social-emotional development. When technology is used, it should be used as a means to encourage interactions between children and adults and among children.
- Emphasize active, experiential learning. Focus on creating and promoting experiences that spark children's natural curiosity, foster self-directed investigations, and involve physical activity rather than passive screen time.

- Consider the unique needs of English learners. Work from an asset-based lens when offering supports, and partner with families to build upon multilingual families’ funds of knowledge. Websites such as [Ellevation](#) from the [Wide Open School](#) project offer distance learning activities and other resources to supplement existing and new curricula.
- Consider the unique needs of students with IEPs. Utilize universal design for learning (UDL) to ensure that children with developmental delays and disabilities have access to the same opportunities as the rest of the student population, and leverage technology for IEP meetings and assessments. *On the Road to High-Quality Early Learning* offers a detailed look at how to implement these systems, and there are [promising models](#) for recruiting and retaining diverse, high-quality early childhood educators who can meet the needs of students with IEPs.

Develop standards for digital learning that articulate how technology should be used to empower learners

As [research confirms](#), productive policies for using technology do not try to replace teachers with electronic workbooks, which many studies have found to be ineffective; rather, they use interactive technologies in concert with teachers and peers to enable learners to explore and create rather than to “drill and kill.” One literature review summarized succinctly the typical uses and effects of technology in relation to different learner populations, noting that “the drill and practice activities favored in low-SES [socioeconomic status] schools tend to be ineffective, whereas the uses of technology disproportionately used in high-SES schools achieve positive results.”⁴ An analysis of data from the National Assessment of Educational Progress (NAEP) illustrates the point:

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The use of simulations/applications in eighth grade and games in the fourth grade positively affected test scores, whereas drill and practice at the eighth grade negatively affected the scores. In science, games ... word processing ... simulations ... and data analysis ... all positively affected test scores. And in eighth grade reading, use of computers for writing activities positively affected test scores, but use of computers for grammar/punctuation or for reading activities (which usually involve drill or tutorials) negatively affected test scores.⁵

States can encourage these more effective uses of technology by creating standards and guidance and offering strong models for others to learn from. For example, in addition to its No. 1 ranking for internet access, Wyoming has created a [Digital Learning Plan](#) that provides a robust structure for digital learning and implementation, focusing on personalized, student-centered learning. (See Figure 2.1.) This research-based framework includes seven key “gears”: (1) curriculum, instruction, and assessment; (2) use of space and time; (3) robust infrastructure; (4) data and privacy; (5) community partnerships; (6) personalized professional development; and (7) budget and resources. This framework guides professional learning and other supports for educators.

Figure 2.1
Wyoming's Framework for Digital Learning



Source: Wyoming Department of Education Digital Learning Plan.

Another resource is the International Society for Technology in Education's (ISTE) [standards](#) for student learning in the digital age, which are the foundation for resources available through [ISTE Connect](#). Reflecting the ways in which technology is a tool for empowerment, the seven standards suggest the ideal student in the digital age is:

1. An Empowered Learner: Students leverage knowledge to take an active role in choosing, achieving, and demonstrating competency in their learning goals, informed by the learning sciences.

2. A Digital Citizen: Students recognize the rights, responsibilities, and opportunities of living, learning, and working in an interconnected digital world, and they act and model in ways that are safe, legal, and ethical.
3. A Knowledge Constructor: Students critically curate a variety of resources using digital tools to construct knowledge, produce creative artifacts, and make meaningful learning experiences for themselves and others.
4. An Innovative Designer: Students use a variety of technologies within a design process to identify and solve problems by creating new, useful, or imaginative solutions.
5. A Computational Thinker: Students develop and employ strategies for understanding and solving problems in ways that leverage the power of technological methods to develop and test solutions.
6. A Creative Communicator: Students communicate clearly and express themselves creatively for a variety of purposes using platforms, tools, styles, formats, and digital media appropriate to their goals.
7. A Global Collaborator: Students use digital tools to broaden their perspectives and enrich their learning by collaborating with others and working effectively in teams locally and globally.

Enact distance learning with attention to equity

Distance and hybrid or blended learning models carry their own equity challenges that will need special attention from school districts.

For example, [Portland Public Schools](#) in Oregon has proposed a model for reopening in which the first 2 weeks of school are dedicated to foundational activities conducted virtually prior to students returning to school buildings in small A/B cohort models. These activities include ensuring that every student has a working device and online access along with multiple opportunities to become familiar with the learning technology, to learn new health protocols, and to have their social and emotional needs assessed.

Other districts are creating educational support hubs to enable students to succeed at distance and blended learning. San Francisco schools, which will start the school year with remote learning, will help up to 6,000 students this fall with their distance learning needs by transforming dozens of recreation facilities, libraries, and community centers across the city into “[learning hubs](#)”—spaces where young students who may struggle with remote instruction can go each day to access their digital classwork and the social interactions that virtual schooling cannot provide. As Maria Su, the Executive Director of San Francisco’s Department of Children, Youth and Their Families, noted:

The barriers for distance learning are not just access to Wi-Fi. It’s making sure that children have a quiet place to even connect in to their Zoom calls and have the support they need to ... submit homework and participate virtually.⁶

The hubs will offer computers and internet connections necessary for students to connect with their teachers and classwork remotely, along with some of the trappings of ordinary scholastic environments, such as meals, snacks, exercise, and peers. The first 40 such hubs will prioritize serving low-income families, children in public housing or the foster care system, youth experiencing homelessness, and others in living situations that make remote learning particularly challenging. At first, the hubs will serve students in kindergarten through 5th grade, a group that has lower rates of infection, but officials will consider making the hubs available to older students. They will operate 5 days a week during ordinary school hours and will be staffed by experienced nonprofits and other organizations—many of which already partner with the city to provide after-school programs.

A [similar plan](#) in West Contra Costa Unified School District will be managed by education professionals for the 25% of families who have reported they struggle to facilitate distance learning for their children. A district leader explained:

What we're doing is taking the homeschooling process out of the living rooms and dining rooms of some of those 25%, and providing them a place with qualified people who can facilitate and help them if they've got issues with wellness or technology or nutrition or attendance or English language or academics.⁷

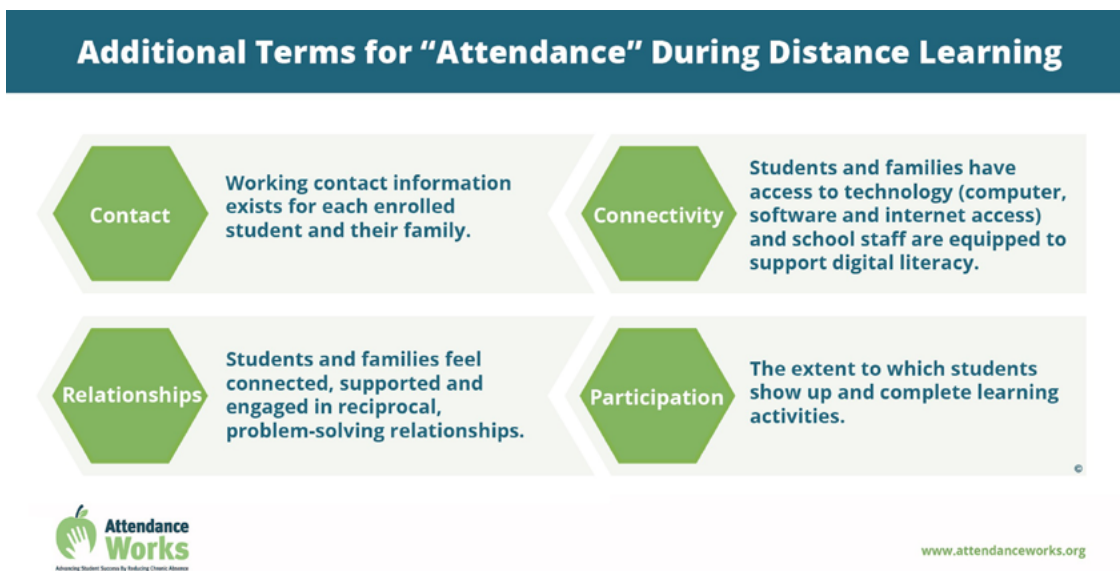
The plan prioritizes serving high-need students in three tiers. Those in the first tier are the first priority for student support hubs: They include students with high numbers of absences, students from underserved populations, students in special education, youth in foster care, and children experiencing homelessness. The second tier includes students who have had little participation in distance learning, as well as students who are learning English as a second language and students with mental health concerns. The third tier includes students whose parents have expressed the need for out-of-home support for distance learning.

Shift from measuring seat time to engagement

Key to the new models of learning that are emerging is for states to rethink how they count attendance—which is often tied to funding as well as to compulsory education laws and requirements for instructional minutes. The [role of attendance](#) in a hybrid, student-centered learning system shifts from time spent in class to engagement, participation, and student outcomes. Attendance Works defines attendance in this context as relying on contact, connectivity, engagement around wellness and social and emotional learning and supports, and participation in learning activities (see Figure 2.2).

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Figure 2.2
Additional Terms for “Attendance” During Distance Learning



Source: Attendance Works. *Monitoring Attendance in Distance Learning*.

States such as [Kentucky](#) and [California](#) have redefined attendance for the coming school year when students are in distance learning mode to include not only the time students are logging in to online instruction, but also the time equivalents for their work on assignments and assessments. Student completion of assignments, collaboration on projects, and other measures of student engagement, including check-ins with peers and teachers, can give students more ownership of the learning process, while encouraging engagement in meaningful work. Further, in personalized, competency-based models, teachers can track students’ development of knowledge and skills through their progress on projects, portfolios, and performance assessments and by monitoring their [learning progressions](#). Using these examples and the resources provided, even inexperienced districts and schools can successfully implement strong and more equitable distance learning.

Resources

- [ISTE Standards for Students \(ISTE\)](#). This interactive website provides additional detail and illustrative videos on seven standards for leveraging technology. The site helps educators, schools, and districts adopt these standards and put them into practice in order to create authentic learning opportunities that empower student voice and prepare students to be future-ready, lifelong learners.
- [At-Home Teaching and Learning in PreK-3rd Grade](#) (National P-3 Center). This document provides specific guidance related to school districts’ and elementary schools’ supports for at-home learning across the primary grades (pre-k to 3rd grade) based on fundamentals of effective teaching and learning in early childhood.

- [Attendance Playbook: Smart Strategies for Reducing Chronic Absenteeism in the COVID Era](#) (Attendance Works and FutureEd). This playbook provides a detailed, three-tiered approach to addressing a lack of student attendance whether classes are held in person or online.
- [Restart & Recovery: Considerations for Teaching and Learning: Academics](#) (Council of Chief State School Officers). This resource includes strategies states might consider as they work to support their districts as they adapt instruction in response to the COVID-19 pandemic.
- [What Will Return to School Look Like This Fall? A Look Inside Hybrid Learning Plans](#) (Panorama Education). This website describes additional examples with links to states and districts that are developing hybrid learning models for fall 2020.
- [Supporting Learning in the COVID-19 Context](#) (Policy Analysis for California Education). This research brief provides 10 recommendations with accompanying resources for implementing distance and blended learning.

Endnotes

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