



A Low-Tech Approach to Remote Learning

This document is a companion to our ["Statement on EdTech and Education Policy During the Pandemic."](#) As we substantiate in that Statement, EdTech rarely improves test scores and puts children's privacy, physical health, and intrinsic motivation for learning at risk.

While the pandemic has necessitated the use of online tools for communication and collaboration during remote learning, we need not rely on algorithm-driven instruction and technological sparkle to keep students motivated and engaged. Indeed, over-reliance on EdTech during the pandemic could prove toxic by exacerbating feelings of loneliness and undermining students' love of learning.

The Action Network's approach to remote pedagogy is grounded in the conviction that human connection and human relationships are fundamental to learning, and that students are most motivated when they feel personally connected to learning materials, their teachers, and their learning communities.

The purpose of this document is to help guide educators, schools, and districts seeking to limit unnecessary screen time during remote learning while attending to equity, multicultural, and social justice issues and increasing student engagement. We do not seek to create new curricula. Instead, we hope to inspire educators and parents to insist — as we do in our [Statement](#) — that educators be allowed to work together and employ their intelligence and creativity to design and deliver curricula that keep all students engaged while deepening their learning, even in a pandemic.

LOW-TECH REMOTE PEDAGOGY: SEVEN GUIDELINES

- 1 Connect school to student's daily lives with place-based lessons
- 2 Promote student ownership over the learning process using project-based learning
- 3 Connect social and emotional learning (SEL) to students' lived experiences
- 4 Assign printed materials and handwritten homework whenever possible
- 5 Remain mindful of internet access variability amongst students when designing lessons
- 6 Strengthen student/teacher and teacher/parent bonds with regular communication
- 7 Increase professional development and teacher collaboration to help master remote classroom management

1 Connect school to student's daily lives with place-based lessons.

Place-based lessons have the added benefit of increasing students' intrinsic motivation and sense of belonging while supporting community investigations and community-building in the classroom.

Place-based lessons can utilize outdoor spaces and non-academic activities in and around the home (e.g., cooking, creating non-digital games, drawing, photography, taking a walk, exploring neighborhood architecture, grocery shopping) to teach traditional academic subjects (e.g., math, art, social studies, science).

Examples of categories of place-based lessons that might apply to various age groups include: life sciences, environmental exploration, communities and community change, applied math, physical structures/architecture, social structures, political science.

KEY TO SUCCESS

One size will not fit all! Students will engage more easily and learn more when they believe that lessons are connected to their individual lives and circumstances.

RESOURCES FOR PLACE-BASED LESSONS

- ["What is Place-based Learning and Why does it Matter?"](#) is an excellent explanatory resource (primarily text, but also featuring infographics, photographs, and links to podcasts, videos, and other resources). Written and curated by *Getting Smart*, this downloadable PDF describes how place-based learning can occur indoors and outdoors from pre-school to university and offers both design principles for developing your own place-based lessons in any setting (p. 7) and links to diverse samples of place-based lessons. (Various grade levels)
- Inspired Teaching has put together a bank of [high-engagement lessons](#), including place-based lessons. Lessons can be filtered by grade level, and many are pandemic-aware. (Various grade levels)
- *OpenSciEd* has created an excellent resource for [teaching science remotely](#) that includes [lessons from a place-based perspective](#) that use household items like plastic cups. (Various grade levels)
- Outdoor education is a popular form of place-based learning with [benefits backed by research](#). Here we've highlighted resource pages from three outdoor education groups: 1) *The Promise of Place* has created a searchable database of [stories describing place-based learning in action](#) to support and inspire educators as they develop place-based lessons; 2) *Out Teach* has created a [searchable bank of lesson ideas](#) in English and Spanish appropriate for K-5 students; 3) *The Children and Nature Network* offers a collection of [downloadable infographics](#) to help teachers and parents connect children to nature and advocate for outdoor learning (Most resources explicitly address K-5, but can be adapted for higher grades)
- Outdoor classrooms have a long history and offer many [learning benefits](#). Moreover, they are a relatively safe way to introduce face-to-face learning during the pandemic — at least while the weather allows. *Green Schoolyards* provides tips for [creating and utilizing outdoor classrooms](#). (Best for elementary students)

2 Promote student ownership over the learning process and help students explore new interests using project-based learning.

By asking students to solve real-world challenges or meet real-world needs, project-based learning helps students understand the real-world value of the skills and knowledge they learn in the classroom.

Ideally, project-based lessons will involve multiple modalities of learning, not just computer-based research. Examples of projects that might apply to various age groups include: exploring how to stay well during a pandemic, observing the weather or the night sky, collecting and analyzing data about the environment or the community, learning or creating a new, socially-distanced dance, or corresponding with a relative or pen pal.

When possible, such projects can contain [service learning](#) components, so that students are engaged not only in reflecting on societal issues, but also trying to effect positive changes, such as learning how to organize a socially-distanced neighborhood clean-up.

KEY TO SUCCESS

Supplying students with a rubric that clarifies teacher expectations while helping students track both project completion and project quality.

RESOURCES FOR PROJECT-BASED LEARNING

- ["What is Project-based Learning?"](#) by *Magnify Learning* is an excellent explanatory and how-to resource that includes links to instructor stories, design tools, blogs, podcasts, and videos. (Various grade levels)
- *PBL Works* explains [the difference between simply assigning a project and Project-based Learning](#). (Various grade levels)
- *Teaching Tolerance* has compiled a bank of ["Do Something"](#) project-based lessons related to racial and social justice. (Various grade levels)
- This *Edutopia* article describes ways to [implement project-based learning with and without tech](#), at [various grade levels](#), [and without over-taxing parents/caregivers](#). Brief descriptions of project-based lessons and links to sample lesson plans included. (Various grade levels)
- What does Project-based Learning look like in action? This short video follows third graders in San Jose, CA as they complete a tech-intentional ["Tiny House" project](#) in which they practiced math, reading, design, presentation, and SEL skills. The video is part of a collection showcasing ["gold standard" project-based learning in action](#). (Various grade levels)

3 Connect social and emotional learning (SEL) to students' lived experiences by weaving it into curriculum rather than relying upon SEL-based EdTech

According to the Collaborative for Academic, Social, and Emotional Learning ([CASEL](#)), social and emotional learning "enhances students' capacity to integrate skills, attitudes, and behaviors to deal effectively and ethically with daily tasks and challenges."

Even remote classrooms offer opportunities to practice and model SEL competencies such as self-management and responsible decision-making without the use of privacy-invasive EdTech.

SEL competencies are particularly important now, as millions of children are facing pandemic-driven challenges and trauma related to witnessing and/or being victims of systemic racial injustice.

KEY TO SUCCESS

Remembering that there are no right answers in SEL. The objective is to create opportunities for students to talk about hard-to-discuss issues regarding how the pandemic and other real life events and conditions have affected them.

RESOURCES FOR SOCIAL AND EMOTIONAL LEARNING (SEL)

- *CASEL's* ["What is SEL?"](#) webpage offers a solid introduction to the concept of Social Emotional Learning.
- This article by *Dena Simmons*, Assistant Director of the Yale Center for Emotional Intelligence, describes ["white washed" SEL](#) and how to avoid it, offering strategies for teaching SEL in ways that help students navigate "unjust realities."
- This New Jersey Education Association [SEL tip sheet](#) reminds educators that they are "teaching children and youth (not subjects) and serving as guides to their parents and guardians."
- Trauma-informed SEL is particularly important during the pandemic. The Trauma and Learning Policy Initiative (TLPI), a collaboration of Massachusetts Advocates for Children and Harvard Law School, is dedicated to ensuring that all students, including those traumatized by exposure to violence and childhood adversity, succeed in school. TLPI has created a helpful guide for [adopting a trauma-sensitive lens in an equitable way when teaching remotely](#).
- Discussing literature "book club style" over telephone or videoconference is a particularly valuable way to address SEL concepts without requiring students to speak directly about their own personal lives. Facing History and Ourselves has created a very useful [guide for running remote book clubs](#), with many linked resources.

4 Increase student comprehension and retention by assigning printed materials and handwritten homework whenever possible

The proliferation of e-books, online textbooks, and online homework assignments has been a convenience and a cost-saver for some, but research has shown that online texts are not good for student learning.

During remote schooling, the temptation will be to rely on technology even more for reading and writing. However, with a little ingenuity and forethought, districts can encourage paper-based learning with all the benefits it brings to reading comprehension, deep thinking, and creative expression.

KEY TO SUCCESS

Establishing consistent methods for contactlessly exchanging print and paper materials. These might involve using the mail, digital photographs of hand-written work, and/or designated pick-up/drop-off locations.

RESOURCES FOR USING PAPER TEXTS AND HANDWRITTEN WORK

- There has been a great deal of research about the benefits of reading from print (versus online), as summarized in this [Hechinger report article](#); and research by UCLA's *Maryanne Wolfe* shows how [reading from screens](#) can impede our ability to grasp complexity in texts, empathize with others, and perceive beauty.
- This *Psychology Today* article describes research in cognitive psychology and neuroscience showing why [handwriting supports students' academic development](#) better than keyboarding.
- *EverySchool.org* has developed a set of [practical tips for incorporating printed materials and handwriting](#) into remote instruction.
- This [news story](#) describes how one district used donated newspaper vending machines and existing meal delivery infrastructure for contactless delivery of printed instructional materials.
- This *Washington Post* column reminds us that ["distance learning"](#) pre-dates [digital technology](#). Think of "correspondence courses," conducted with books and pencil and paper and utilizing the postal service. *They* did it and so can we: the key is a strong connection between educator and student.

5 Bridge the digital divide by remaining mindful of internet access and connectivity variability amongst students when designing lessons and connectivity

Not all students have access to broadband internet at home. For students living in smartphone-only homes — i.e., the vast majority of students living in poverty — low connectivity speeds and data caps may be an issue.

Some students may have internet access at certain times of day only, lack technical assistance, or lack access to private spaces for video conferencing. Others may have access only when service bills can be paid, or may have devices that need the family's devices at the same time.

Low-bandwidth instructional and assessment strategies involving asynchronous delivery of lessons and receipt of homework, weekly (rather than daily) assignments, text-based assignments and assessment, and audio-only lectures can reduce the impact of access and connectivity inequities.

KEY TO SUCCESS

Remembering that hardware and internet access alone cannot close the "digital divide."

RESOURCES FOR ADDRESSING EQUITY ISSUES

- In this interview for *Harvard EdCast*, *Uche Amaechi*, Lecturer in the Harvard Graduate School of Education, details how [digital inequality is not just about access to hardware and broadband](#). (You can listen to the interview or read the transcript.)
- Based on a survey of 2,000 educators, Teaching Tolerance created ["Teaching Through Coronavirus: What Educators Need Right Now,"](#) a report that includes links to a wide variety of resources including lessons that can be adapted for students without online access, banks of "printables for pick up," as well as banks of "Do Something" tasks and student-friendly documentaries. Many of these resources address issues of public health and racial and social justice during the pandemic. (Various grade levels)
- ["How to Properly Flip Your Classroom"](#) outlines a low-tech-friendly and easy-to-customize process for "flipping" your classroom. Flipping is one way to reserve precious synchronous learning time for group discussions. (Various grade levels)
- To help students practice perspective-taking and facilitate teaching history from a social justice perspective, the Zinn Education Project (ZEP) has created a bank of student-driven [activities that can be adapted for synchronous and asynchronous learning](#). You can find inspiring teacher accounts of using ZEP lesson plans [here](#). Please read ZEP's statement ["How to — and How Not to — Teach Role Plays"](#) before deploying these lesson plans in your classroom. (Best for secondary students.)
- This *EdTech Magazine* article describes [strategies for using Chromebooks and GSuite offline](#). Please note that most of these strategies must be implemented by a member of your school's IT/EdTech administrator. (You can listen to or read this article.)

6 Pique student interest and strengthen student/teacher and teacher/parent bonds with regular communication

Be it video-conference, email, text, telephone, or snail mail, regular communication with students *and* parents/guardians is essential.

KEY TO SUCCESS

Spending time at the beginning of the year getting to know students and families, and establishing consistent protocols for managing communication between all parties.

RESOURCES FOR MINDFUL COMMUNICATION

- This article from *Edutopia* describes ways that schools can ["focus on relationships by centering them in policies and practices."](#)
- The Educators team at Understood put together a collection of [resources to support educators in building relationships with students and families](#) during the pandemic. These resources include an article summarizing the research that shows how positive student/teacher relationships improve learning outcomes, a printable survey for teachers to distribute to caregivers, and tip sheets for communicating with families and incorporating SEL into your teaching during the pandemic.
- It's one thing to say regular communication with students is critical, but what should that communication entail? This 1-page [Guide to Short Chats That Will Deepen Relationships](#) from *EdWeek* describes a two-stage process, and includes sample phrases.
- Staff at Teaching Tolerance interviewed experts from the *National Child Traumatic Stress Network* to create this resource to support teachers in [creating a sense of stability and support in virtual classrooms](#).
- Trauma-sensitive experts and school leaders share equitable, [trauma-sensitive ways to communicate with students and families](#) during the pandemic in this article published by the Trauma and Learning Policy Initiative (a collaboration of Massachusetts Advocates for Children and Harvard Law School).

7 Especially for school leaders: Increase professional development time to help teachers master the art and science of remote classroom management while bolstering the teacher creativity and teacher collaboration necessary to create pandemic-responsive curriculum

Best practices for teaching remotely are not always obvious. Additional professional development time will increase the speed with which teachers fully-adapt their practice, and strengthen bonds among teachers as they work together to ideate, plan, and evaluate new place-based, project-based, and (perhaps even) curricularly-integrated lessons. To share and stimulate best practices, district and/or teachers unions can develop online resource banks.

KEY TO SUCCESS

If teaching is remote, try to have at least one day per week set aside for teacher collaboration and professional development.

RESOURCES FOR PROFESSIONAL DEVELOPMENT AND RESOURCE SHARING

- For teachers, connecting with each other, planning around diverse student needs, and figuring out what works has become essential in the current environment. This *Educational Leadership* article provides [examples of how teachers around the world collaborate](#) to create high-engagement learning opportunities.
- The American Federation of Teachers has created an online forum for teachers to share both [lessons](#) and [other resources](#) during the pandemic.
- In this *EdTech Magazine* article, an experienced instructional technology coach shares [best-practices for virtual classroom management](#).
- This *Chronicle of Higher Education* article offers [tips that save teachers time while energizing students](#). The tips are relevant for high school classrooms too!

Conclusion

Nothing about the 2020-2021 school year will be easy. Parents and educators will be guiding children's learning in both remote, hybrid, and face-to-face settings, often at the same time!

Yet if we have learned anything from the difficulties of last spring, we've learned how important relationships are to learning and that we must make every possible effort to keep all students engaged with pedagogy that enlivens — not deadens — the learning process. Educators, administrators, and parents: *we can do this!*

The resources provided in this document are a starting point, not the end point. We acknowledge that place-based and project-based lessons may require additional planning not only by educators, but also by parents and caregivers, and we strive to assist with resources and support.

For those who care about limiting the reliance on EdTech during this next year of pandemic learning, several [additional resources](#) can be found [here](#). These include video recordings of "reopening" webinars produced this summer by the Children's Screen Time Action Network, and our [Screen Time Action Kit](#).

This is a living document. We welcome new resources. More importantly, educators *need* new resources. It is our fervent hope that educators will be given the time and permission needed to develop their own low tech and tech-intentional units and lessons, and that unions, grade-level teams, districts, and even states will support the creation and promotion of mechanisms for sharing best practices.