NEPC
NATIONAL EDUCATION POLICY CENTER

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Newsletter

Lighter Screen Use During Dark Days: Tips for Lessening the Role of Edtech in Remote Instruction During the pandemic

As school buildings have closed to slow the spread of the coronavirus, remote learning has become synonymous with online learning. But does it have to be that way? A coalition of educators and researchers say no. Earlier this month, the Campaign for a Commercial-Free Childhood's (CCFC) Children's Screen Time Action Network issued a statement urging schools to limit the use of educational technology, even if the 2020-21 school year kicks off with full- or part-time remote instruction. More than 70 experts in education, child development and technology signed the statement, as did three dozen advocacy groups – including the Network for Public Education, the Massachusetts Teachers Association, and the Boston Teachers Union.

"A large body of research demonstrates that excessive screen time is harmful to children," said National Education Policy Center Fellow Faith Boninger, who is the co-director of NEPC's Commercialism in Education Research Unit (CERU).

> Algorithm-driven, "personalized" learning is not an effective way of teaching students, and it threatens their privacy. With no end in sight to the pandemic, school leaders would do well to remember that remote learning does not have to equal online learning, and to emphasize offline approaches to support children's well-being and learning.

CERU's research has found that online learning programs put important educational decisions (such as determining a child's grade level) in the hands of opaque algorithms owned by private companies. Boninger and her colleagues have identified programs such as Summit

Learning that have rapidly expanded, even in the absence of third-party evaluations examining their effectiveness. They have also highlighted the ways in which contracts between edtech providers and school districts fail to protect student data privacy.

Other researchers have found that excessive screen time itself can be damaging to children, leading to problems such as eyestrain, attention issues, and diminished cognitive abilities. The nonprofit Everyschool, an advocate for healthy edtech use, recommends limiting daily screen use to no more than 20 minutes for first graders and no more than 70 minutes for high school seniors.

But how is that possible if children are confined to their home to prevent the spread of the coronavirus?

Here are some of the suggestions offered by the CCFC Children's Screen Time Action Network statement:

- **Read books**: Much of a child's schoolwork involves reading. There's no reason that can't take place offline. In fact, multiple studies suggest that students understand and retain more when they read books rather than screens and that they are even more likely to say they've been "transported" by narratives when they read fiction books. Schools can ship books to families, or arrange for them to pick them up in person
- **Write by hand using pen and paper**: A German study found that young children were better able to learn words when they wrote them out by hand rather than typing them. And college students who take notes by hand may retain more information, a 2014 study suggests. Especially if the work does not need to be immediately graded, students should be able to write notes, homework, classwork and other materials the way their grandparents did—with a pen and paper.
- **Do artwork**: If parents cannot provide supplies such as paints or paper, they can pick up other resources periodically at school.
- **Engage in hands-on math lessons**: This has the added benefit of demonstrating that math has real-world applications. For example, children can measure a room to determine the square footage. Or figure out how to double a cookie recipe that calls for 1 and ¾ cups of sugar. Older students can figure out the answers to more complex questions. For example, this guide to social justice math includes an exercise in which high school students were asked to use three different methods to determine whether a toxic waste facility was at least 1,000 feet away from a school.
- **Get outdoors**: Not only does this encourage physical movement, it opens up the possibility of hands-on observations of the natural world.
- **Experiment with science at home**: For example, here's a collection of experiments students can do without dangerous or pricey laboratory materials.

Certainly, online education has benefits when children are stuck at home. But its excessiveness can be moderated by adopting practices like those described above, with screen time devoted to student-teacher interactions rather than solitary pursuits like clicking through

algorithm-based programs that drill students with one digital worksheet and test after another. In the meantime, the Campaign for a Commercial-Free Childhood statement urges school officials to safeguard students' privacy when signing edtech contracts and to avoid making hasty, ill-advised purchases in the heat of the pandemic, since such decisions can lead to the overuse of edtech for years to come.

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