

7 Ways to Help Kids Unplug from Technology

by Launa Schweizer

My childhood unfolded in the last few years BC (Before Computers). However, my own children and my students have lived their entire lives with bleeps and buzzes and signals from multiple channels of information. Parents and teachers alike worry about the impact that constant multitasking is having on children's developing brains.

Kids—digital natives—swim comfortably in the floods of information and often crave the sensation of clicking from screen to screen, flicking from channel to channel, and juggling tasks throughout each day. The problem, according to neuroscientists, is that multitasking is changing our human brains as we prioritize juggling over digging deeply into thinking, relationships, and planning.

But beyond constantly nagging our kids to unplug, what can parents and teachers do to help them develop the habits of mind that make for a happy life and deeply creative thought? I recently attended a brilliant presentation from neuroscientist and educator JoAnn Deak, who shared practical ideas, rooted in solid scientific research, that will help us to help our kids.

And what's even better? These ideas are also a win-win for adults, because if we can practice what we preach, we'll also be helping ourselves stay focused and centered.

1. Don't confuse juggling multiple tasks with deep thinking.

Doing lots of work at one time may give us the false impression that we're working more efficiently. But studies show that doubling up on tasks increases errors and prevents us from doing any one thing very well.

This is because, neurologically speaking, "multitasking" does not exist. When we juggle tasks, we're not working deeply; instead, we're doing part of one thing at a time, in series, and allowing ourselves to be constantly interrupted.

As Deak explained to the teachers at the conference, shifting from one mode to another

leads to an inevitable loss of focus in the original mode. If you're deeply involved in, say, writing an essay, and you hear the sound of an incoming text message, your deep attention is broken and requires effort to rebuild. Breaking your flow of concentration means that it's more difficult to get back to deep thought. We need to teach kids to limit distractions and to complete one task at a time.

2. Give learners time for input, then processing, then output.

As Deak explained, we can take in new information by listening, reading, looking, hearing a lecture, or watching a film. However, as soon as we need to process that information in order to store it to memory, the input channel has to be temporarily interrupted. When we process that information, we sort it, categorize it, summarize it, or otherwise put it into order, drawing information into deeper and more permanent brain structures, creating memories.

After input and processing happen, we're ready to engage the third channel, "output." When our brains are engaging in this function, we are practicing, explaining, speaking, writing, drawing, or otherwise producing our own version of what we have learned, or connecting old ideas together in new ways. This step drives the information further into memory.

And not every learning experience needs to end in a test or a term paper. In terms of learning, the form of output is not as important as the three-step process: 1. Input. 2. Processing. 3. Output.

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3. Help kids to learn to break up the three stages—on purpose.

Deak suggested that most people can't pay close attention for more than 10 or 20 minutes, possibly 30 maximum. After a predictable interval of input (reading a chapter, learning a new skill from an expert, or listening to an oral lesson), it's important to take two or three minutes to turn the information over in your mind and consciously shift to the processing stage. These kinds of questions help brains to process:

"What's the main idea? What evidence supports that idea?"

"What are three words that describe this thing I am learning?"

"How does this relate to what I already know?"

"How can I use this information?"

Taking time to process moves our thinking back from the prefrontal cortex toward the hippocampus, where memories are made. Asking great questions, not just simple factual questions, of young learners helps them process what they've learned.

But even that level of memory storage has a limit, which is why our brains learn best when we move to the level of output—of using the information in the context of what we already know. Rather than letting these three stages happen (or not), we can learn most efficiently if we commit to making each step happen in sequence.

4. Unplug to speed up.

Neuroscience explains one reason why homework seems to take longer now than it did when we were kids: Switching from one mode to another breaks the flow of concentration and makes it harder to get it back. If students are watching TV (even with the sound off), with earbuds pumping music (even music without words) and a smartphone nearby jingling with social media updates as well as text messages, their attention will be constantly diverted from the task at hand.

The same is true for adults at home or at work. It's not all in your head: If you're a heavy user of technology, those valuable devices are eating your time and attention and rarely give any back. Too much technology, left on all the time, makes everything take longer. So if you know you or your child has a task to do, use an app like Self Control or Think to strategically shut down digital stimuli that get in your way. Here are some productivity apps you might find useful.

5. Break the phone addiction.

Brain research shows that every new notification, email, bleep, ping, or letter dropping into our mailboxes can produce a brief emotional rush, the result of a tiny hit of dopamine (the neurochemical responsible for the sensation of pleasure) in our brains. We also get a little dopamine rush from hearing an emotionally gripping song. The problem? Those rushes teach us to reach down for our phone, refresh the screen, and click among the applications we use most to see what's new. In the Internet age, there is something new literally every second—and therefore no limit to the amount of information and stimulation we can click for.

Sure, some of us are ER doctors, on call at all times. But for the rest of us, putting the phone down, turning it off, and walking away gives our brains the chance to clear the drive for dopamine and open up to what's going on right in front of us. Kids need us to model powering down at regular intervals.

And for children and teenagers, the impulse to text, particularly late at night, can be overwhelming. Most experts recommend that parents collect their children's telephone 30 minutes before the time they need to be asleep. So charge those phones far from anyone's bedroom!

6. Understand that Attention Deficit Hyperactivity Disorder is real, not just a symptom of our times.

Some of our brightest thinkers flip all too easily from one idea to the next. While they may be adept at making new connections, their brains lack the strong electrical signals required to release neurochemicals into brain synapses to keep messages moving along smoothly.

In brains with ADHD, too many signals are blocked by the deficit of neurotransmitters, leading to the diffusion of the deep concentration required to learn. In a way, an ADHD brain acts like a brain trying too hard to multitask, dropping thoughts.

Deak also mentioned that other common afflictions can produce this sort of situation: dehydration—even mild dehydration—lack of sleep, or high stress produces a mental state that mimics ADHD. This is why the proper diagnosis of ADHD is so time-consuming and important.

The prescription of stimulant medication to treat ADHD remains controversial, but Deak likened it to insulin for a diabetic. A brain with ADHD needs more dopamine and norepinephrine in order to allow it to make connections, precisely the effect of stimulant medications.

The other thing about stimulants? If a brain really does struggle with ADHD, the medication tends to work. If someone with a neurotypical brain takes stimulants, he or she is likely to feel jittery and wired. But a relatively brief trial of medication (half the time on stimulants and half on a placebo) can quickly achieve results. For 80% of people who truly have the disorder, the current forms of medication work well when prescribed by an experienced and sensitive physician.

7. Model mindfulness: Play with your kids.

The pace of modern life has given us enormous gifts but also requires us to consciously tune out the world's external stimuli if we want to truly "tune in" to our experiences, our relationships, and a deeper understanding of concepts and ideas.

For adults, mindfulness exercises, writing poetry, taking walks in the park, or merely leaving all our devices turned "off" for long stretches of the day can allow us to slow down our minds to the pace at which they were meant to work.

But kids tend to be most mindful and present while they play, with screens off. Do your child's developing brain a favor: Set the phone aside—both of you—and find time for both of you to do what you love. Go deep, get silly, and connect in real time. Your child's brain depends on it.