

## What Does Learning Really Look Like?

The path forward in addressing this problem is likely long, and certainly complicated. There is crucial work to be done at every level. We must think deeply about the technology we create, and work to reduce its harms and bolster its benefits; to do nothing and simply accept things as they are would be a travesty, but to turn our backs entirely and reject everything electronic would be an unnecessary waste of potential (if even possible). For better or worse, our magical rectangles and the platforms and networks they spawned are here to stay; our current predicament demands we be more careful, thoughtful, and intentional about how we use these technologies, both inside and outside the classroom.

Beyond the walls of the classroom, this issue must be addressed in the public sphere. As a society of concerned democratic citizens, **we must lobby for more ethically designed technologies**. Organizations like the Center for Humane Technology are leading this effort, both by spreading awareness and taking action, but the voice of the masses has an important role to play as well. We can demand platforms and devices that encourage well-being instead of low-level cognition and mental health crises.

We must also resist the illusion that individual boycotts, or singular sweeping declarations will bring Facebook or Twitter under control; speaking up and advocating for humane technology informed by neuroscience will be a long, slow fight against some very powerful players.

In the shorter-term, we must also deal with these crises by **helping our young people develop healthier relationships with their mobile devices and online platforms**. For many of us who were born in more recent decades, these technologies are part of the way we navigate the world. Our smartphones are bodily extensions; social media platforms are where we connect to our communities; the internet is our playground.

## What Does Learning Really Look Like? (cont.)

Most importantly though, our habits and ways of interacting with these technologies have arisen organically, without planning and without caution — a dangerous approach to products designed to exploit human vulnerabilities. We ought to be transparent, honest, and realistic with young people about these issues; a top-down enforced abstention from social media is akin to digital solitary confinement if no alternatives for social connection are presented. Developing healthy and intentional technological habits not only promotes the development of higher-order cognitive skills, but also better sleep habits, fewer mental health struggles, and stronger attention regulation abilities, but it need not come at the cost of connectedness. After all, if Silicon Valley can do it, we can do it.

Luckily, the attention economy has not yet slithered its tentacles into our classrooms the way it has invaded (and colonized) other public arenas. But as technology plays more of a central role in education, such as during a global pandemic, it's of utmost importance that we be aware and honest about the positive and negative potential that technology can unleash depending on how we use it.

For years now, technology has been expanding opportunities (albeit unevenly) for students to learn in new, unbelievable ways. The pandemic has only kicked that trend into overdrive. Students with internet access can connect with peers around the globe, access the entirety of human knowledge, create and innovate using powerful user-friendly tools, and so much more. Technology can, and should, continue to amplify the best parts about humanity. Learner-centered environments can harness technology to supercharge collaboration, creativity, and democratization. New tools can help us radically reimagine what it means for learning to become “personalized”. But without careful implementation, technology can also undermine the very same educational goals by biasing our students away from complex cognitive skills, and preventing them from processing the social and emotional significance of what they learn.

## What Does Learning Really Look Like? (cont.)

Beyond caution in the classroom and societal indignation, this is an opportunity for a deeper, more meaningful response from us all. We can, and we must, **change our mental image of what “learning” really looks like.**

Students, parents, and educators alike must understand that breaks to go outside, quiet reflection at the end of a lesson, or peer discussions in between classes — that’s not frivolity. That’s not separate from the process of deep learning. That is real, crucial work right there; that’s what makes learning last, what makes learning meaningful, what sticks with students and makes their education real to them. The fact that these opportunities arise informally, squeezing through the tiny cracks in a rock-solid daily schedule should tell us something. Perhaps they’re not weeds, but flowers that will make the path more beautiful and nourishing, if given room to grow.

It’s easy, especially in the era of Zoom-school, to slip into a mindset of “constant engagement”. Learning through video calls is already far more draining for students, both physically and emotionally, and parents’ anxiety about “falling behind” and college readiness are fueling a panicked frenzy to inundate students with even more tasks and content. We must consider the drawbacks of constant, external, task-oriented attention on our students’ learning; if our goal is for students to engage in the deep, meaningful learning that we know leads to long-term retention of skills and content-knowledge, we should make sure we aren’t shooting ourselves in the foot. Our good intentions might actually be draining their attentional resources.

For educators in particular, this means a fundamental shift in the way we design and conceptualize learning experiences. If students have a biological need for time and space to constructively reflect on new learning — why not design for that?

reDesign’s Learning Cycle Framework can be a really useful tool here, as opportunities for meaning-making and synthesis/reflection are baked right into it.

## What Does Learning Really Look Like? (cont.)

In fact, we contend that each of those processes deserves explicit time and space dedicated to it within a larger project or lesson. If “constructive internal reflection” relies on a brain network that is naturally deactivated while students investigate new content, then expecting them to synthesize and reflect while new content is being presented is like pitting their brain networks against each other! Instead, we should be giving students explicit opportunities to connect new information to prior schema at the outset, to synthesize new ideas in their own words, and to pause and reflect on their own learning process; the Learning Cycle Framework can help you design to do just that.

Most importantly, we must help students to develop a metacognitive awareness of these processes, so that they feel capable and empowered to make their learning meaningful. Once they are aware that it’s not only natural, but necessary to engage in “constructive internal reflection”, they can begin to consciously practice effective learning habits.

Building in opportunities for students to connect their learning to its abstract social, emotional, and moral implications not only allows them to engage in deep learning, but helps them develop an awareness of that part of the learning process. It’s time we all — teachers, students, and society more largely — built a new mental image of what learning looks like, one that values “Looking Out” and “Looking In” equally and in complement. Our students (and their brains) will certainly appreciate it.

