How to be a (Human) Student Again

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Reflections on In-Person Learning from the Past: On Solitude and Communion

Some years ago I was struck by how many false things I had believed, and by how doubtful was the structure of beliefs that I had based on them. I realized that if I wanted to establish anything in the sciences that was stable and likely to last, I needed – just once in my life – to demolish everything completely and start again from the foundations. It looked like an enormous task, and I decided to wait until I was old enough to be sure that there was nothing to be gained from putting it off any longer. I have now delayed it for so long that I have no excuse for going on *planning* to do it rather than getting to work. So today I have set all my worries aside and arranged for myself a clear stretch of free time. I am here quite alone, and at last I will devote myself, sincerely and without holding back, to demolishing my opinions.

—— Descartes, *Meditation on First Philosophy* (1641)

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"All of humanity's problems stem from our inability to sit quietly in a room alone."

—— Blaise Pascal, *Penseés* (1654)

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"If I had to choose between a so-called university which … gave its degrees to any person who passed an examination in a wide range of subjects, and a university which had no professors and examinations at all, but merely brought a number of young [people] together for three or four years and then sent them away… I have no hesitation in giving preference to that university which did nothing over that which exacted of its members an acquaintance with every science under the sun."

—— John Henry Newman, *The Idea of a University* (1852)

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"Our first point is that the language in which something comes to speak is not a possession at the disposal of one or the other of the interlocutors. Every conversation presupposes a common language, or better, creates a common language. Something is placed in the center, as the Greeks say, which the partners in dialogue both share, and concerning which they can exchange ideas with one another. Hence reaching an understanding on the subject matter of a conversation necessarily means that a common language must first be worked out in the conversation. This is not an external matter of simply adjusting our tools; nor is it even right to say that the partners adapt themselves to one another but, rather, in a successful

conversation they both come under the influence of the truth of the object and are thus bound to one another in a new community. To reach an understanding in dialogue is not merely a matter of putting oneself forward and successfully asserting one's point of view, but being transformed into a communion in which we do not remain what we were."

—— Hans-Georg Gadamer, *Truth and Method* (1960)

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"What Socrates discovered was that we can have conversation with ourselves, as with others, and that the two kinds of conversation are somehow interrelated. Aristotle, speaking about friendship, remarked: "The friend is another self" - meaning: you can carry on the dialogue of thought with him just as well as with yourself. This is still in the Socratic tradition, except that Socrates would have said: The self, too, is a kind of friend. The guiding experience in these matters is, of course, friendship and not selfhood; I first talk with others before I talk with   myself, examining whatever the joint talk may have been about, and then discover that I can conduct a dialogue not only with others but with myself as well. The common point, however, is that the dialogue of thought can be carried out only among friends …   It is characteristic of "base people" to be "at variance with themselves and of the wicked to avoid their own company; their soul is in rebellion against itself."

—— Hannah Arendt, *Life of the Mind* (1977), channeling Socrates (d.399 CE) and Aristotle (d.322 CE)

Reflections from the Present: To What Extent Should In-Person Learning Have a Future?

"Online Learning is Not the Future of Higher Education" by Peter Herman
Inside Higher Ed (June 2020)

A crisis, as the saying goes, is a terrible thing to waste, and the tech utopians have wasted little time in promoting the move to online teaching as a permanent solution to higher ed's problems.

Tal Frankfurt, a technology consultant and contributor to *Forbes* magazine, proposed that [1] the emergency replacement of traditional classrooms with virtual ones should "be viewed as a sort of 'bypass' button'" for the usual snail's pace of educational change. We're all online now, Frankfurt says -- let's stay there. After all, virtual learning is better because it enables "students to reach greater heights and not be limited by a predetermined set of circumstances."

Nor is Frankfurt alone. In a recent op ed in [2] *The New York Times*, Hans Taparia writes that online education, previously considered a "hobby," could be the silver bullet that rescues higher ed from the financial ravages of the coronavirus pandemic.

Politicians have also climbed on board the train. Jeb Bush announced [3] that online is "the future of learning," and Governor Andrew Cuomo, with Bill Gates (of course) standing next to him, wondered why we need all these buildings when we have technology? "The old model [4]" of a classroom, the governor opined, is over and done with. It's time to "reimagine" education with computers and laptops "at the forefront." While both deal with K-12, the proposal to replace "all these buildings, all these physical classrooms" with virtual spaces applies equally well to higher ed.

But what do students have to say about the differences between online and traditional teaching? Do they look forward to online education as "the future"?

The argument over the relative merits of online versus face-to-face education always runs into this crucial roadblock: students (presuming they pass) do not take the same course twice. Once you take Shakespeare 302, or Chem 101, or Econ 102, you move on.

But thanks to the sudden switch to online teaching in the middle of the semester, students can compare the digital with the analog versions of their classes. What's more, since each student takes three to five (sometimes more) courses, they experienced multiple modalities

of online education, from Zoom meetings to fully asynchronous courses taught via videos and podcasts. For the first time, a student can say, "I took the course both ways, and here's what I think." While it's true that for many, the transition was rushed, don't underestimate how many profs put together viable online classes that ranged from Zoom to fully synchronous (more on that term below) classes with all the bells and whistles.

To find out their responses, I asked my students to write an evaluation of their experiences with online education. While almost all are English majors, they are the definition of diverse: traditional, nontraditional, male, female, LGBTQ, first-generation college student, not first generation, single parent, person of color, different religions, foreign (one student hailed from Germany), some with a learning disability, and veterans. No doubt I've missed a few categories. All, however, are "digital natives," the generation who are addicted to their phones and screens. So there is no assumed bias against or unfamiliarity with the digital world.

But for all their differences in age, gender, ethnicity, sexual orientation, citizenship and intellectual preparedness, they universally agreed on their evaluation of online learning: they hated it. There is no comparison, they said over and over again, between the two. One student said that she felt like she wasn't getting 10 percent of the regular class. Another wrote, "I haven't learned anything since we went online." (For the record, I asked for and received permission to quote their responses.) "It seemed too easy," wrote a third. "I did not feel challenged like I had been in the first half of the semester, and I felt the quality of learning had gone way down." "I watched the lectures posted, but I wasn't learning the material," wrote another. All told, moving online caused "a profound sense of loss."

Part of the problem originated in the enforced idleness caused by the pandemic. With in-person classes canceled, jobs evaporating and shelter-in-place orders, the structure by which many organized their day had disappeared, leaving many students feeling lost and adrift. As one student put, "[I] now lived in a world of uncertainty, with no clear end in sight." Pre-pandemic, the necessity of showing up at a particular time at a particular place shaped their days and "established an environment in which my focus was tailored completely to my education." Without the "consistency" of having to show up on, say, Tuesday and Thursday, 11 o'clock, many reported that it was easy to let classes slide and not take them as seriously as before. Plus, for some, there are the distractions of having to live at home, sharing space and computer time with parents and siblings, not to forget pets.

Taking online classes also means that the distractions of the web are right before their eyes. "The major benefit of in-class learning is that the classroom leaves out distractions," writes one student, but now, "I have the biggest source of gaming, shopping and socializing right in my face."

However, there is a more profound reason for their dislike of online learning, and ironically, it is online education's chief selling point.

The major advantage of online learning is asynchronicity, or, "anytime, anywhere learning [5]."

Lectures do not take place at a specified time, but are recorded as videos or podcasts. Assignments are done on a computer, often graded by a computer. Not being tied to a classroom also means no limitations on enrollment. Class size is no longer limited by room size but can grow to accommodate any number of students.

What this means in practice is that the student takes the class alone. There is no immediate interaction between the professor and the students, no immediate interaction among the students. It's just a student sitting in front of a screen, and that's what my students disliked the most: "we basically have to teach ourselves. It's like paying tuition to watch YouTube videos."

More than one complained they were not getting their money's worth: "I do not pay the hefty tuition for online classes"; "I feel for all the students paying thousands and thousands of dollars to attend SDSU when in reality they are stuck behind a computer screen." A third was more specific: a prerecorded video "is by far the least efficient and beneficial [mode of learning]. Prerecorded videos give students no room to ask questions or engage in class discussion."

Ironically, students reaffirmed Plato's criticism of writing over face-to-face discussion. If you ask an inanimate object, in this case, a piece of writing or a painting, a question, Socrates says, you don't get an answer. Instead, it goes on "telling you just the same thing forever." Ask a video a question, or a podcast, and you will not get a response. You can't engage it in dialogue, and as Socrates says, it's in dialogue -- teasing out of ideas, challenging them, argument and counterargument -- that genuine education happens.

That key point gets reiterated in every response: students missed human interaction. The central difference is that during a regular semester, "the lessons are in person, and not on a screen. This is important because it helps me and other people pay attention when the teacher is in the same room as us. You get more out of what they are saying when you can see their body language, and it's more a personal experience."

The transition from face-to-face to online removed the opportunity to learn "from other students," and breaking into smaller groups or commenting on each other's writing was no substitute for the real thing. In a traditional classroom, "there is this level of intimacy that just cannot develop in an online setting. The college experience is truly about making human connections. Schools, one student insightfully noted, "are like small towns. There is so much more than just classrooms, and to have classes go online, that takes away so much from the student experience."

The farther a class got from face-to-face, the less students liked it, and the less they got out of it. Conversely, the closer a class got to approximating the traditional classroom, the better. Students preferred Zoom classes (for all their drawbacks) for two reasons.

First, turning classes into Zoom meetings that started and ended at the same time as the regular class helped "restore some type of balance and structure" to their lives. One student said that she "was grateful for the normalcy that the recurring class meetings" gave her.

But more profoundly, Zoom restored, if in a lesser form, the conversations, the back-and-forth, the human interactions of the traditional classroom. Because students can talk to each other and the professor in real time, "it feels more personal. I found myself more willing to answer and participate." This student summed it up best:

Some of the best courses I have taken during my time in college have been the ones that are small, and where the professor and students develop a sense of trust with one another. This trust can only be attained by person-to-person contact. There is this level of intimacy that just cannot develop in an online setting. The college experience is truly about making human connections.

God knows, Zoom is not perfect. The sound can be terrible, and there are serious privacy issues. But for all its problems, Zoom helps restore the "human connections" missing from virtual classes, which is why several students said that everyone's camera should be on during the session. The point is not just to hear, but to see, each other.

Many teachers fear that when the pandemic recedes and normality returns, administrators will try to keep as many classes online as they can. After all, as Bush and Cuomo say, online is supposed to be the future.

But the opposite will likely happen, because most students don't like online classes. Having gone virtual once, and experienced different modalities, there is no desire, no groundswell, to make the change permanent. If anything, both students and faculty want to get back to the traditional classroom as quickly as possible, now that they have experienced both. To be sure, online teaching has its place, especially for students who could not otherwise attend college [6], and given the health risks, it's how we need to teach until there's either a cure or a vaccine for COVID-19.

But online learning is not the future. Never was. Never will be. It's just not what students want.

Online and Blended Learning [7]

Technology [8]

Transforming Teaching & Learning [9]

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[3] https://www.washingtonpost.com/opinions/2020/05/03/jeb-bush-its-time-embrace-distance-

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[6] https://community.chronicle.com/news/2353-on-not-drawing-conclusions-about-online-teaching-now-or-next-fall?cid=VTEVPMSED1

[7] https://www.insidehighered.com/news/news-sections/online-and-blended-learning

[8] https://www.insidehighered.com/news/focus/technology

[9] https://www.insidehighered.com/news/news-sections/transforming-teaching-learning

**"For some College Students, Remote Learning is a Game Changer"
by Amanda Morris and Emily Anthes**
New York Times (Aug 2021)

When Daniel Goldberg took his final exams last December, he was attired in little more than a baby-blue hospital gown with an intravenous line snaking out of his arm.

Over the past year, Mr. Goldberg, a 24-year-old law student at Arizona State University, has toggled between attending classes and consulting with his doctors — sometimes from his hospital bed.

Before the pandemic, Mr. Goldberg, who has a painful, chronic inflammatory bowel disease, missed classes whenever he needed medical attention. But over the past academic year, he didn't miss a single class, and he said he had become a better student as a result.

"It's helped me realize, like, 'Wait, why can't I get these accommodations all the time?'" he said. "I should be able to attend via Zoom if I need to."

Mr. Goldberg, whose condition also leaves him immunocompromised and more vulnerable to the coronavirus, asked for online accommodations as classes return in person this fall — a request the university recently granted.

Although many college students have struggled with remote learning over the last year, some with disabilities found it to be a lifeline. As the fall semester approaches, those students are pushing for remote accommodations to continue, even as in-person classes resume.

In fact, long before the pandemic, many students with disabilities had been calling for such accommodations, often to little avail. The past year, however, has made remote instruction seem more feasible. While some colleges have resisted remote learning as an accommodation, others say they are considering it.

"The argument in the past, pre-Covid, was, 'Of course, an online course is fundamentally different than a course in the classroom,'" said Arlene Kanter, an expert in disability law at the Syracuse University College of Law. "Well, Covid changed all that."

Colleges and universities are generally required to provide "reasonable" accommodations or modifications for qualified students with disabilities — as long as those changes do not "fundamentally alter" the nature of the program or pose other undue burdens for the institutions.

Those terms have always been open to interpretation and debate. But because many colleges did not offer discounts on tuition for remote learning last year, they could have a harder time arguing that it is fundamentally different from, or inferior to, in-person instruction.

"It becomes maybe a little tricky for school officials to then later claim that going online would be a serious degradation of the educational environment," said Adam M. Samaha, an

expert in constitutional and disability law at New York University's School of Law. "If that is good-enough education, then a student might claim, 'Why not extend the same principle to a person who has physical difficulty commuting to the classroom?'"

Cameron Lynch believes colleges weren't built with students like her in mind. To get to class at the College of William & Mary in Williamsburg, Va., Ms. Lynch, a rising sophomore with muscular dystrophy, said she had to navigate uneven brick walkways. And some of the campus's old buildings lack accessibility features like elevators or ramps.

"Walking to class is always kind of difficult, regardless of Covid, so it's nice to be online," Ms. Lynch said.

Ms. Lynch, who also has celiac disease and diabetes, is immunocompromised. And even though she is vaccinated, she is fearful of getting the coronavirus and has lived much of the past year in isolation.

Last year, when her college started offering classes in person again, she discovered that some of the classes she needed take for her double major in sociology and government were no longer being offered online. She brought her concerns to the college's disability services office. It declined to allow her to attend her required classes remotely.

"They kind of just told me to take an extra semester," Ms. Lynch said.

Ms. Lynch, who took online courses over the summer to catch up, said she was "stressed out" about the fall semester and unsure whether she would be able to take all the classes she needed online.

Suzanne Clavet, a spokeswoman for William & Mary, declined to comment on Ms. Lynch's case and said the college considered online learning as a possible accommodation on a case-by-case basis. In an email, she said, "In some instances, remote courses are not possible if this would result in a fundamental alteration of the course."

Remote accommodations appeal to some faculty members, too. Cornell University faced pushback from faculty members when it announced that it would "not approve requests" for remote teaching, for reasons including disability accommodations.

Two days later, the university said that "short-term or partial remote instruction" could be considered for those unable to study or teach in person this fall. But "not a lot of classes" would be considered eligible for remote instruction, even if they were taught remotely last year, said Michael I. Kotlikoff, Cornell's provost.

Ms. Lynch said that in Chronic and Iconic, an informal online support group that she founded for immunocompromised college students, students could "rant with people who get it" when they might otherwise feel isolated and unsupported on campus.

Students don't have much recourse. "I can't sue because it's too expensive, and I didn't want to cause any problems in my school," Ms. Lynch said.

Even just knowing that online classes are an option can help students with disabilities by assuring them that there is a safety net.

Last semester, Sophia Martino, a senior at the University of Missouri who has spinal muscular atrophy and uses a wheelchair, chose to attend two lab-based classes in person. In May, she got sick with Covid-19, despite being vaccinated.

Even after that hard year, she plans to take classes in person this fall. But knowing that the university has already given a handful of students permission to attend classes remotely this year, she said, makes her feel better about attending in-person classes, because there are accommodations if she needs them.

"The idea of remote instruction as an accommodation is something that's newer from the pandemic," said Ashley Brickley, director of the university's disability center.

Indeed, online classes are not a panacea, as Cory Lewis, a biology major at Georgia Military College, discovered last year. Mr. Lewis has sickle cell disease, which can cause fatigue, chronic pain and organ damage and leaves him especially vulnerable to infectious diseases. He was hospitalized four times last year, including once for kidney failure, and spent months with lingering pain.

If it had been a normal academic year, he might have had to withdraw from classes, he said. Instead, he was able to stay enrolled. An enterprising biology professor even mailed out at-home lab kits, packed with all the supplies he needed to conduct a variety of hands-on experiments.

But Mr. Lewis struggled to focus in his other remote classes, and his grades slipped, he said. So he plans to return to in-person learning this fall, even though he worries about his health.

"I just learn a lot better when I'm actually in front of the teacher," said Mr. Lewis, who is fully vaccinated but said that some of his classmates were not. "But knowing that my health could be at risk, especially with the Delta variant, I don't know what's going to happen with school now."

He is grateful that he had the flexibility of remote learning. Ms. Martino, for her part, would like to have the option to attend remotely long after the pandemic ends — perhaps on days when her muscles ache and it's hard to get out of bed, or when the weather is bad and it is difficult to get to class in her wheelchair.

"Maybe in the future they would think about having them hold like a hybrid class where if you needed to attend online, that'd be nice," she said.

"How to Teach in an Age of Distraction" by Sherry Turkle
The Chronicle of Higher Education (2015)

At MIT, I teach a seminar on science, technology, and memoir. Enrollment is capped at 20 students. The atmosphere is intimate. We read memoirs by scientists, engineers, and designers, and then the students tell their own stories.

Some of them have lived hardscrabble lives. During one recent semester, their stories were particularly poignant. One had escaped with his family from the former Soviet Union. Another had overcome deep poverty; there were many nights when he had no choice but to sleep in his car. And yet, through all of this, these students had found their way to science or engineering or design. Sometimes the inspiration had come from a teacher, parent, or friend. Sometimes it came from fascination with an object — a broken-down car, an old computer, a grandfather clock. The students seemed to understand each other, to find a rhythm. I thought the class was working.

Then, halfway through the semester, a group of students asked to see me. They admitted to texting during class, but they felt bad about it because of the personal material being discussed. They said they text in all their classes, but here it seemed wrong. We decided the class should talk about this as a group. In that discussion, more students admitted that they, too, texted in class. They portrayed constant connection as a necessity. For some, three minutes was too long to go without checking their phones. They wanted to see who was in touch with them, a comfort in itself.

We decided to try a device-free class with a break for checking messages and emails. For me, something shifted. Conversations became more relaxed and cohesive. Students finished their thoughts, unrushed. They seemed more present and able to be in an uninterrupted conversation. When they were not tempted by their phones, the students told me, they felt more in control of their attention. With phones in hand, they felt control slip away. An irony emerges. For of course, on the surface, we all see our phones as instruments for giving us greater control, not less.

A lot is at stake. Where we put our attention is not only how we decide what we will learn, it is how we show what we value.

Dropping out of a classroom conversation can begin with a moment of boredom or because a friend reaches out to you. And once you are in that "circuit of apps" (as one student called it), even the best class can't compete.

In classrooms, the distracted are a distraction: Studies show that when students are in class multitasking on laptops, everyone around them learns less. Distraction is contagious. One college senior says, "I'll be in a great lecture and look over and see someone shopping for shoes and think to myself, 'Are you kidding me?' So I get mad at them, but then I get mad at myself for being self-righteous. But after I've gone through my cycle of indignation to self-hate, I realize that I have missed a minute of the lecture, and then I'm really mad."

Even for those who don't get stirred up, when your classmates are checking their mail or Amazon, it sends two signals: This class is boring, and you have permission to check out — you, too, are free to do other things online.

Despite research that shows that multitasking is bad for learning, the myth of the moment is that multitasking is a good idea. We are not inclined to let this myth die because multitasking feels good. People talk about multitaskers as addicted. But I find that discussing the power of technology in those terms makes people feel helpless. It is as though they are facing something that is by definition more powerful than they could ever be. Resistance seems futile. But many do resist. Writers, artists, scientists, and literary scholars talk about disenabling the Wi-Fi on their computers to get creative work done. In the acknowledgments of her most recent novel, Zadie Smith thanks "Freedom," a program that shuts off connectivity on the Mac.

The analogy between screens and drugs breaks down for other reasons. There is only one thing you should do if you are on heroin: Get off it. Your life is at stake. But laptops and smartphones don't need to be removed. They are part of our creative lives. The goal is to use them with greater intention, to live with them in greater harmony.

Instead of thinking about addiction, it makes more sense to explore how we are vulnerable to certain things that technology offers. The path forward is to learn more about our vulnerabilities and design around them. To do that, we have to clarify our purpose. In education, learning is the focus, and we know that multitasking is not helpful. So it's up to us to actively choose unitasking.

Many educators begin with an accommodation: They note that students check websites in class — and they say, fine: This is the 21st-century equivalent of doodling and passing notes. But some do more than accommodate the distractions of digital media. They take students' new practices and see them as an opportunity to teach in a new way. And then they call this progress.

The Duke University literary theorist Katherine Hayles argues that fractured attention is the sensibility of our age and that to look back to "deep attention" is to be unhelpfully nostalgic. Students, says Hayles, think in a new mode, the mode of "hyper attention." Educators have a choice: "Change the students to fit the educational environment or change that environment to fit the students."

For Hayles, there is no real choice. Education must embrace the culture of hyper attention. As an example of a constructive way to do this, Hayles points to experiments at the University of Southern California in a classroom outfitted with screens.

One mode of interaction is "Google jockeying": While a speaker is making a presentation, participants search the web for appropriate content to display on the screens — for example, sites with examples, definitions, images, or opposing views. Another mode of interaction is "backchanneling," in which participants type in comments as the speaker talks, providing running commentary on the material being presented.

Google jockeying speaks to our moment. Students want to turn away from class when there is a lull. Google jockeying implicitly says, all right, we will get rid of those lulls. Even experienced faculty start to ramp up their PowerPoint presentations in a spirit (not always acknowledged) of competing with students' screens. Or we tell students, as Hayles suggests, to go to the web during class.

But there is another way to respond to students who complain that they need more stimulation than class conversation can provide. It is to tell them that if they have a moment of boredom, it means that something is being asked of them: They must go inward and draw upon their imaginative life. We can tell them what we now know to be true: A moment of boredom is an opportunity for new thinking. But it can be short-circuited if you go to the web.

College should be a time to invest in teaching students about the long-term value of open-ended conversations.

If boredom happens in a classroom, rather than competing for student attention with ever-more extravagant technological fireworks, we should encourage students to stay with their moment of silence or distraction. We can try to build their confidence that such moments — where you stay with your thoughts — have a payoff. They give time to engage with yourself and with the subject. We can present classrooms as places where you can encounter boredom and "walk" toward its challenges.

A chemistry professor puts it this way: "In my class I want students to daydream. They can go back to the text if they missed a key fact. But if they went off in thought … they might be making the private connection that pulls the course together for them."

Those who are fluent in both deep attention and hyper attention have the advantage of attentional pluralism; they can switch between the two, depending on what is needed. That fluency should be our educational goal. But it's hard to achieve. Hyper attention is not only easier, it feels good. And without practice, we lose the ability to summon deep attention.

When you train your brain to multitask as your default approach — when you choose hyper attention — you won't be able to focus even when you want to. You're going to have trouble sitting and listening to your children tell you about their day at school. You're going to have trouble sitting in a meeting and listening to your colleagues. Their narrative will seem painfully slow. Just as middle-school children don't acquire the skills for conversation because they lack practice, university students lose the capacity to sit in a class and follow a complex argument.

Research shows that when people watch online educational videos, they watch for six minutes, no matter how long the video. So videos for online courses are being produced at six minutes. But if you become accustomed to getting your information in six-minute bites, you will grow impatient with more-extended conversations.

Maryanne Wolf, a cognitive neuroscientist at Tufts University, had long observed students' fractured attention spans, but did not feel personally implicated until one evening when she

sat down to read *The Glass Bead Game* by Hermann Hesse, one of her favorite authors. Wolf found it impossible to focus. She panicked and wondered if her life on the web had cost her this ability. She began to study what skimming, scanning, and scrolling do to our ability to read with attention — what she calls "deep reading." Her thesis is that a life lived online makes deep attention harder to summon. This happens because the brain is plastic — it is constantly in flux over a lifetime — so it "rewires" itself depending on how attention is allocated.

If the brain is plastic, then at any age it can be set to work on deep attention. So if we decide that deep attention is a value, we can cultivate it. Indeed, that is what Wolf discovered for herself. After two weeks of effort, she was again able to focus sufficiently to immerse herself in reading Hesse. Wolf's experience suggests a pedagogy that supports unitasking and deep reading. But if we value those skills, we have to actively choose them.

Carol Steiker, a professor at Harvard Law School, is committed to a particular form of unitasking: that which follows naturally when students take class notes by hand. For many years, she allowed her students to take notes on laptops, as they had done as undergraduates. If a student couldn't pay attention in a law class, that would soon become the student's problem: He or she would not be prepared when called on and wouldn't understand the material as well as the others.

But Steiker's position has changed radically. She saw that students taking notes with computers suffered from more than inattention. They were losing the ability to take notes at all. They "seemed compelled to type out the full record of what was said in class," she said. "They were trying to establish transcripts of the class." Students were becoming court stenographers. But she wants note-taking to help students integrate the themes of her class. For her, note-taking trains students to organize a subject in a personal way. It cultivates an art of listening and thinking that is important to future lawyers.

Steiker says that the urge to "transcribe" had a curious side effect: Her law students didn't want to be interrupted in class. Steiker says: "They sometimes seemed annoyed if you called on them because it broke up their transcriptions. If your notes are meant to capture the themes of the class, you remember your participation and you make it part of the story. If you are trying to write a transcript of class, class participation takes you away from your job."

Now Steiker allows no technology in any of her classes. In a device-free class, she says, "the students seem less annoyed when you call on them." She's optimistic, convinced that taking notes by hand is forcing her students to be better listeners.

If you tried to design an educational technology perfectly suited to the sensibilities of hyper attention, you might come up with the MOOC, or massive open online course. Yet after *The New York Times* designated 2012 as the Year of the MOOC, an irony emerged. Research shows they work best when combined with the least measurable element of a traditional classroom: presence. Even in the most technical subjects, such as calculus, students in online classes do better when they include face-to-face encounters. The director of a Columbia University study that compared online and face-to-face learning sums up its findings: "The

most important thing that helps students succeed in an online course is interpersonal interaction and support."

Since students struggle with conversation, it makes sense to engage them in it. Conversations teach attention, how to listen, how to be in a relationship. Educational technology, with all its bells and whistles, only highlights the simple power of conversation.

Many who were behind early MOOC initiatives saw the traditional classroom as a problem that technology could solve. Daphne Koller, a co-founder of Coursera, saw traditional "live" classrooms as places that silence students. "When a question is asked in a 'live' course," says Koller, "some students are online, shopping for shoes on Amazon, some are not paying attention, some smarty-pants in the front row answers the question before the rest of the class even has had a chance to know a question has been asked." In an online course, on the other hand, everyone has a chance to ask a question and get feedback. Your question will never be pre-empted. For Koller, the lack of "live" presence creates a new equality. With no one there, everyone can be "heard." No one in the front row will upstage you.

As Koller sees it, "flipped" classrooms — combining online work with in-class discussions — should result in students' spending more time with professors in a setting of real interaction. Students would have learned the basic content online before the class even meets. Now, together, they are free for a deeper interaction.

Unfortunately, it doesn't always work that way. The "discussion sections" in blended classrooms are often with teaching fellows, with the professor moving from group to group. A student in an MIT class acknowledges that she gets to listen to the professor speak in an online video, but she wishes she could hear him lecture in person. He is an international figure and has a reputation for being charismatic. She feels she is missing out.

Her reaction is not surprising. If you ask people where their love for learning comes from, they usually talk about an inspiring teacher. The most powerful learning takes place in relationship. What kind of relationship can you form with a professor who is lecturing in the little square on the screen?

Administrators look at the dwindling numbers of students who show up to lectures and draw the reasonable conclusion that if the class were offered online, students would prefer to take it there. Students report more-complex attitudes: Even if they miss classes, they are not eager to trade in their classrooms.

They tell me they want company. They are afraid that they already spend too much time alone and online. They say they need structure. One says: "I am going to listen to the lecture anyway. I have to. I don't want to do it all lonely and maybe sad. I'd rather go with my friends. I'm in college!" Another says: "To motivate myself to sit alone and sit in front of the computer? No matter how motivated I am, to block out an hour, it would be so hard. I like the idea that I have to show up. You're showing up to something alive."

When this student talks about the value of "showing up to something alive," he is not denying the value of what you can learn online or what can be measured online. Rather, he is

suggesting that there is another kind of learning not so easily measured. If you go to class you might see something unexpected.

The lecture is the easiest form of in-person pedagogy to criticize. It is the oldest form of instruction. It is the one most likely to involve a passive student. It is also easiest to caricature, as the teacher might be passive as well, perhaps reading notes that were written years ago.

But for all its flaws, the lecture has a lot going for it. It is a place where students come together, on good days and bad, and form a small community. As in any live performance, anything can happen. An audience is present; the room is engaged. What makes the greatest impression in a college education is learning how to think like someone else, appreciating an intellectual personality, and thinking about what it might mean to have one of your own. Students watch a professor thinking on her feet, and in the best cases can say: "Someday I could do that." What the young man meant by showing up to "something alive" was really showing up to some*one* alive — a teacher, present and thinking in front of him.

A moment of boredom is an opportunity for new thinking. But it can be short-circuited if you go to the web.

Even these days, when students talk about large, introductory lecture classes, they mention the importance of being there. A college junior: "I took an introduction-to-psychology class, it was big and I could see it might have been a MOOC, but there was something about being there with all those people. You are part of a group. That's where you make your friends. You talk about the class." And of course, you are there with the professor.

During a panel discussion about the ethics of pedagogy, the Tufts University literary theorist Lee Edelman said that his biggest challenge as a professor "is not teaching his students to think intelligently, but getting them to actually respond to each other thoughtfully in the classroom." Like so many others, he finds that students struggle with the give and take of face-to-face conversation.

Human-resources officers tell me that their new hires have a hard time talking in business meetings. College graduates say the same thing about themselves.

Why would we want to put at the center of our educational agenda a kind of learning in which we don't teach the skill of raising hands and entering a conversation? If doing this makes our students nervous, perhaps our job as educators should be to help them get over it.

Ideally college classrooms are places where students stand up and defend their ideas in real time. They learn from speaking and from listening. That doesn't happen if you take your class alone in your room. The value of attending a live lecture is a bit like the value of doing fieldwork: In fieldwork, there can be dry spells, but you learn to read people in real time. You share a bit of road with those around you, and you come to understand how a group thinks. And you learn the rewards of patience: You have followed arguments as they unfold. If you are lucky, you learn that life repays close, focused attention.

In a recent course, I required students to collaborate on a midterm project. I imagined them in conversation, working together at long tables in a dining hall. I imagined late nights and cold coffee in Styrofoam cups. But there were no late nights or long tables. All the collaboration happened on Gchat and in Google Docs.

When my students handed in their projects, their work was good. But when I gave out the assignment, I was interested in more than the final product. I know that the alchemy of students sitting around a table can sometimes spark a conversation that leads to a new idea. Instead, my students found an app that made presence unnecessary. They had a task; they accomplished it with efficiency.

My experience in that course is a case study of why measurements of productivity in higher education are dicey. Gchat and Google Docs got the job done by classical "productivity" measures. But perhaps the value of what you produce, what you "make" in college, is not just the final paper — it's the process of making it.

My students are unapologetic about not meeting in person. Jason, a sophomore, says: "The majority of my studying in the past year has been that someone makes a Google Doc with the terms that need definitions, you fill in the ones you know, and then you work on it together. You have a chat session and you do that to collaborate." This joyless description made me rethink my fantasy of long tables, cold coffee, and late nights. My fantasy, from his point of view, asked for the unnecessary. But his reality allowed little space to talk about a new idea.

Sometimes, students who collaborate with online chat and electronically shared documents work in the same building. They simply choose not to study in the same room at the same table. They go into online chat sessions rather than chat in person. Why? For one thing, they tell me, roles can be made clear, and it is also clear when someone falls behind. More important, when you collaborate online, everyone stays on point. People may drop out to text or shop online, but when they are on the chat, they are on topic. In a face-to-face meeting, you can see people's attention wander off to their phones. On Gchat, the inattention of your peers is invisible to you. Gchat lets the simulation of focused attention seem like attention enough.

But it doesn't leave room for what I want my students to experience when they collaborate. I call it intellectual serendipity. It may happen when someone tells a story or a joke. Or when someone daydreams and comes back with an idea that goes in a new direction. None of this is necessarily efficient. But so many of our best ideas are born this way, in conversations that take a turn.

Given an opportunity to collaborate, my students glide toward the virtual. Some tell me that anything else, regardless of the merits, is impractical in today's college environment. Everyone is too "busy." I can't help but think that talking in-person is one of the things they should be busy with.

In my interviews with students, most insist that they will know when they have to schedule a face-to-face meeting. But you really don't know when you are going to have an important

conversation. You have to show up for many conversations that feel inefficient or boring to be there for the conversation that changes your mind.

When the psychologist Daniel Kahneman won the Nobel in economic science, he was, like every winner, asked to write an official biographical statement. One section of his biography is a tribute to his late colleague, Amos Tversky. Kahneman explained that the ideas for which had he won the prize grew out of their time spent working together. In the end, his Nobel biography amounts to a love letter to conversation.

We spent hours each day, just talking. When Amos's first son Oren, then fifteen months old, was told that his father was at work, he volunteered the comment "Aba talk Danny." We were not only working, of course — we talked of everything under the sun, and got to know each other's mind almost as well as our own. We could (and often did) finish each other's sentences and complete the joke that the other had wanted to tell, but somehow we also kept surprising each other.

Collaboration is a kind of intimacy. You don't just get more information. You get different information.

What also is striking in Kahneman's Nobel biography is his description of the pace of his work with Tversky. In 1974, Kahneman and Tversky wrote an article for *Science* that went on to be one of the founding documents of behavioral economics. It took them a year, working four to six hours a day. Kahneman writes, "On a good day we would mark a net advance of a sentence or two." So the people who support conversation because they think it will make things go faster — "Don't email me, it's faster just to come to my desk and ask me!" — are only seeing a small part of what makes face-to-face conversation powerful. For Kahneman and Tversky, conversation wasn't there to go faster, but to go deeper.

College should be a time to invest in teaching students about the long-term value of open-ended conversations, but in today's environment, it is hard to argue the value of conversation because it is hard to measure with productivity metrics, especially in the short term.

Adam Falk, president of Williams College, has given it a try. He argues that what really matters in a college education is learning "to write effectively, argue persuasively, solve problems creatively," and "adapt and learn independently." And then he and his colleagues investigated where those skills blossom. It turns out that they correlate with the amount of time students spend with professors — not virtual contact, but live contact. Given Falk's findings, it is painful to hear faculty complain that students don't show up for office hours.

Students avoid faculty in large part because they are anxious about the give and take of face-to-face conversation.

Zvi, a college junior, says he is not comfortable with conversation and he doesn't see office hours as a time to practice. "I'm much better emailing professors than in person. I find that I don't represent myself well. … I am not natural with serious conversation [in person] yet. I'd

prefer to be able to do that [in email]." He says that in email, his editing and "working on it" will be invisible.

When asked when he might learn to have serious, in-person conversations, Zvi says it's a skill he'll need to develop soon, not just to talk to professors, but also to potential future employers. He thinks that he might try to talk with professors in his final year of college. But then he considers the reality of actually sitting down with a professor and despairs: "It's too late for that. I don't know — when do you grow up? It is a question."

When students like Zvi say they want to email me rather than see me in person, they usually say that it is in email that they can best explain their ideas. And that will put me in the best position to improve their ideas. They cast our meeting in transactional terms: Zvi has ideas; the professors have information that will make them better. But there's more to gain from a visit to a professor than explaining your ideas. You get to be with someone who is making an effort to understand you. You may feel the support of an adult and of your institution.

Zvi says that he stays away from professors because he doesn't feel grown up enough to talk to them. His professors might be able to help him with that, but not because they'll give him information. Studies of mentoring show that what makes a difference, what can change the life of a student, is the presence of one strong figure who shows an interest, who, the student would say, "gets me." You need a conversation for that.

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What Can In-Person Learning Offer Our Digitizing Society?

Excerpt from "East Coker" by T.S. Eliot

Four Quartets (1940)

"…conversation rises and slowly fades into silence
And you see behind every face the mental emptiness deepen
Leaving only the growing terror of nothing to think about…"

Excerpt from *Missing Each Other* by Edward Brodkin and Ashley Pallathra (2021)

Disconnection in the Age of Connection

You might wonder why we would be concerned about social connection in this age of technology and social networking, in which we have constant access to online socialization. In our high-tech times, it would seem we are in no danger of losing social connections. While unlimited connections are seemingly at the tips of our index fingers and thumbs, the depth and quality of those connections, as well as our capacity to wholly and mindfully tune in to another person, are at risk of being compromised. We may be wired for social connection, but that doesn't always translate to being "good" at sustaining attunement and relationships with others. And the research is clear: low-quality social connections can have startlingly negative consequences on our social, emotional, and even physical health.

Previously we used the example of connecting with someone who was grieving, and the ways in which attunement is built during those moments of deep emotional closeness. While beautiful, that kind of intense connection takes time, effort, and energy, all things that can feel like luxuries in our busy daily lives. It is a challenge to stay present or mindful in the countless interactions that we have on a daily basis. In the rush of life, it can be easy to get lost in the "go go go" mentality of modern society, making it difficult to even identify when your attention and energy away from being present with people, causing us to lose our ability to listen, hear, and internalize what someone else is saying to us. Second, our own thoughts, emotions, and anxieties can have meaningful influences on our ability to connect with someone. It can sometimes feel like a Herculean effort to listen to your child or partner talk about their day, especially if you're mentally running through an endless to-do list, wondering when you're going to have time to grocery shop, pay bills, reply to work emails, and pick up that gift you need for your nephew's birthday party on Saturday. The energy it takes to balance everything going on inside your head and around you can quickly sweep you up and away, preventing you from being in tune with the person in front of you.

Moments of misattunement happen all the time. They can come in the form of something as trivial as forgetting a new acquaintance's name as soon as they introduce themselves, or not hearing someone's reply to a question as you look away to respond to an email. But those quick moments don't have much of a lasting impact. The problem arises when we fall out of tune with people on a more regular basis or for longer periods of time. When those small moments of being unaligned and out of sync stack up, they can quietly become a problem. They start to wear away at your relationships, silently at first, until one

day you begin to realize that the quality of a relationship has plummeted, making it difficult to know how to get it back on track.

Social connection has evolved to take on different forms, especially through the explosive growth of the internet and social media. Our social networks have grown exponentially compared to past generations. You can keep in touch with almost anyone you come in contact with, from high school classmates to the couple you met on your last summer holiday. With chatting now a feature on most apps, you can be balancing conversations with one person on multiple different platforms at the same time. We can send you a book recommendation via text, direct message an announcement about a new meditation group on Instagram, and forward a funny video via WhatsApp, all within a few seconds. Most of these "conversations" come in the form of sharing photos, videos, and/or memes, instead of substantive exchanges. Phone calls to catch up seem almost burdensome in comparison to the short, quick messages you can send instead. On the plus side, the speed and efficiency of these forms of technology allow us to connect with more people, more forms of technology allow us to connect with more people, more often. Communities around the world were reminded of this when video chatting became an even more heavily relied on tool during the 2020 COVID-19 pandemic. But what is the quality of social connection produced from these types of interactions? If there is a distinct difference between online connections and in-person interactions, are we learning or utilizing the same attunement skills in both forms of communication?

In the last decade or two, in which more and more of our communication is done through screens and devices, our ability to tune in to ourselves and tune in to others seems to be changing, flattening, and perhaps withering. This alienates us from both our own inner life and from others. The more time we invest in our online conversations, the less effort we put into prioritizing in-person conversations with other people, and the fewer opportunities we have to develop the confidence and skill needed in having those types of interactions. As a result, many of us start to feel alone in the virtual crowd, isolated and disconnected. To assuage our loneliness, we turn to more technology, leading to a vicious cycle.

Many writers have noted an association among the pervasive use of social media, distraction from face-to-face interaction, and feelings of isolation and alienation. Revered neurologist and writer Oliver Sacks compared the ubiquity of smartphones to the 1909 story "The Machine Stops" by E.M. Forster, in which people live in isolated cells underground, communicating only through devices. Sacks noted how, in the story, humankind is subsumed by the "Machine," which caters to every need or desire one could want "except the need for human contact." In a lot of ways, Dr. Sacks was right: sometimes the "Machine" or online social connection can be deceiving. It's easily possible to go an entire

day without physically coming in contact with anyone, yet you could have multiple conversations with people over your phone. In some ways, that represents a phenomenal feat of technology, something to be celebrated. Family members separated across different countries can let each other know they're okay. It allows for a person confined to their hospital bed a chance to talk to their loved ones. During the COVID-19 pandemic, video chat technology provided a crucial lifeline between patients and family members, and was the only way that patients hospitalized with COVID-19 could see their loved ones. But for everyday life, when we are not in the midst of a pandemic, this technology might inadvertently reduce the social and emotional benefits of physical human contact. Researchers who investigate the impact of technology on our social well-being suggest there is an urgent need for our culture to reinvest in face-to-face conversations, because it is those conversations that lead to true empathy, deeper friendship, love, and productivity.

Dating apps are another avenue in which shallow connections have grown exponentially. Don't get us wrong—the increasing number of wedding invitations from people who've met online is evidence of its success in bringing people together. But dating apps have become so popular, ubiquitous, and heavily marketed that some might have the misimpression that we've successfully hacked relationships with this technology alone. The first step, striking up a conversation on an app, is relatively easy. However, on average, these conversations tend to fizzle, or one suitor will ghost the other before they even get a chance to meet in person. While the app can connect you, it's the follow-up and accompanying ability to tune in to each other that are necessary for the birth of a lasting, genuine connection. Compared to merely swiping right or left on a dating app, these attunement skills are a lot more complex, nuanced, and intricate, and they involve a set of abilities that need to be practiced. And sometimes it feels as though both our opportunities to practice these skills and the motivation of newer generations to put them into action are decreasing at a steady rate.

Although the growth of technological "connection" through smartphones and social media likely contributes to a sense of disconnection, technology alone is not the full explanation. Rather, technology is only one of a complex set of cultural, social, economic, and political factors that is contributing to loneliness. Dr. Cornel West, professor of the practice of public philosophy at Harvard University, has argued that the dark side of our profit-focused society—in which everything and everyone can feel like a commodity— includes lack of community, failed intimacy, loneliness, or what the playwright Arthur Miller called the American disease of unrelatedness. The dark side of an individualistic society lies in the "every man for himself" mentality that aims to promote individual success at the expense of the advantages that come with valuing community bonds. Many social trends indicate an increase in atomization and isolation in the United States, even in the highly populated cities. Levels of trust in other people, time spent with neighbors, and overall

"social capital" (people's network of relationships and shared experiences) have decreased over the last several decades, despite the growth of online communities. In 1985, 36 percent of American adults reported having no close friends, and by 2004 it was 53.4 percent.

Loneliness is not defined by isolation or solitude, but rather by how satisfied you are with your connectedness to people or by loneliness clearly identifies that the quantity of relationships—the number of people you know—is far less important than the quality of those relationships. Many people know what it's like to sometimes feel lonely in a room full of people.
True social satisfaction comes not from the measure of the number of people we know, but from knowing you have people on whom you can depend and who can depend on you in return. Even having just one person who is available and tuned in to you has been shown to yield much lower rates of depression and relationship difficulties, even in the presence of adverse life experiences.

Unfortunately, globally, we are experiencing decreasing levels of empathy and trust and increasing cases of loneliness, social isolation, and anxiety/depression at both the individual and community level. In twenty-first century America, a surprisingly high percentage of people lack relationships with others who know them really well, who they can connect with easily. In a 2018 survey conducted by the health insurance company Cigna, more than twenty thousand American adults were asked to fill out the UCLA Loneliness Scale questionnaire. Fifty-four percent of adults surveyed said that they sometimes or always feel that no one really knows them well; 39 percent said they sometimes or always feel that they are no longer close to anyone; and 27 percent rarely or never feel as though there are people who really understand them. Levels of loneliness were found to be highest in young adults, with 68 percent of Generation Z'ers (those who are now ages 18-22) feeling that no one really knows them well. As we are writing this book during the first months of the COVID-19 pandemic, we are seeing additional spikes in loneliness due to "social distancing" (i.e. physical distancing between people to prevent spread of the coronavirus), which became an urgent public health requirement. Many media commentaries during the pandemic focused on the terrible aloneness that was being felt all over the world.

As social beings who inherently crave depth of connection in order to thrive, we're facing an array of societal factors that drive down the quality of our social connections and offer us endless opportunities for shallow connections. This leaves us feeling increasingly lonely and dissatisfied with our relationships. Yet, despite our loneliness, we often feel too busy to spend much time with people close to us. We've all had moments when we pushed off a confess date with a friend because "things are just too crazy right now." Or sometimes those catch-up conversations at home with your partner or your kids get shortened or get

less attention because things just "need to get done." So what gives? Why is it so hard to just slow down and really invest in our live (in-person) interactions and relationships? For one thing, many Americans need to work multiple jobs in order to support themselves and their families, which leaves them little time to invest in their relationships. More economically privileged Americans may feel many societal pressures to "keep it moving" and to always be "producing," in both their personal and professional lives. And a constant stream of electronic messages feeds into this pressure with unceasing demands for their attention. Another part of the answer may lie in the vicious cycle that many of us get into where we respond to disconnection with greater disconnection.

Excerpt from "The Machine Stops" by E.M. Forester (1909)

Imagine, if you can, a small room, hexagonal in shape, like the cell of a bee. It is lighted neither by window nor by lamp, yet it is filled with a soft radiance. There are no apertures for ventilation, yet the air is fresh. There are no musical instruments, and yet, at the moment that my meditation opens, this room is throbbing with melodious sounds. An armchair is in the centre, by its side a reading-desk — that is all the furniture. And in the armchair there sits a swaddled lump of flesh — a woman, about five feet high, with a face as white as a fungus. It is to her that the little room belongs.

An electric bell rang.

The woman touched a switch and the music was silent.

"I suppose I must see who it is", she thought, and set her chair in motion. The chair, like the music, was worked by machinery and it rolled her to the other side of the room where the bell still rang importunately.

"Who is it?" she called. Her voice was irritable, for she had been interrupted often since the music began. She knew several thousand people, in certain directions human intercourse had advanced enormously.

But when she listened into the receiver, her white face wrinkled into smiles, and she said:

"Very well. Let us talk, I will isolate myself. I do not expect anything important will happen for the next five minutes — for I can give you fully five minutes, Kuno. Then I must deliver my lecture on 'Music during the Australian Period'."

She touched the isolation knob, so that no one else could speak to her. Then she touched the lighting apparatus, and the little room was plunged into darkness.

"Be quick!" she called, her irritation returning. "Be quick, Kuno; here I am in the dark wasting my time."

But it was fully fifteen seconds before the round plate that she held in her hands began to glow. A faint blue light shot across it, darkening to purple, and presently she could see the image of her son, who lived on the other side of the earth, and he could see her. "Kuno, how slow you are." He smiled gravely.

"I really believe you enjoy dawdling."

"I have called you before, mother, but you were always busy or isolated. I have something particular to say."

"What is it, dearest boy? Be quick. Why could you not send it by pneumatic post?"

"Because I prefer saying such a thing. I want —"

"Well?"

"I want you to come and see me."

Vashti watched his face in the blue plate.

"But I can see you!" she exclaimed. "What more do you want?"

"I want to see you not through the Machine," said Kuno. "I want to speak to you not through the wearisome Machine."

"Oh, hush!" said his mother, vaguely shocked. "You mustn't say anything against the Machine."

"Why not?"

"One mustn't."

"You talk as if a god had made the Machine," cried the other. "I believe that you pray to it when you are unhappy. Men made it, do not forget that. Great men, but men. The Machine is much, but it is not everything. I see something like you in this plate, but I do not see you. I hear something like you through this telephone, but I do not hear you. That is why I want you to come. Pay me a visit, so that we can meet face to face, and talk about the hopes that are in my mind." She replied that she could scarcely spare the time for a visit.

"The air-ship barely takes two days to fly between me and you."

"I dislike air-ships."

"Why?"

"I dislike seeing the horrible brown earth, and the sea, and the stars when it is dark. I get no ideas in an air-ship."

"I do not get them anywhere else."

"What kind of ideas can the air give you?" He paused for an instant.

"Do you not know four big stars that form an oblong, and three stars close together in the middle of the oblong, and hanging from these stars, three other stars?"

"No, I do not. I dislike the stars. But did they give you an idea? How interesting; tell me."

"I had an idea that they were like a man."

"I do not understand."

"The four big stars are the man's shoulders and his knees. The three stars in the middle are like the belts that men wore once, and the three stars hanging are like a sword."

"A sword?"

"Men carried swords about with them, to kill animals and other men."

"It does not strike me as a very good idea, but it is certainly original. When did it come to you first?"

"In the air-ship —" He broke off, and she fancied that he looked sad. She could not be sure, for the Machine did not transmit nuances of expression. It only gave a general idea of people — an idea that was good enough for all practical purposes, Vashti thought. The imponderable bloom, declared by a discredited philosophy to be the actual essence of intercourse, was rightly ignored by the Machine, just as the imponderable bloom of the grape

was ignored by the manufacturers of artificial fruit. Something "good enough" had long since been accepted by our race.

"The truth is," he continued, "that I want to see these stars again. They are curious stars. I want to see them not from the air-ship, but from the surface of the earth, as our ancestors did, thousands of years ago. I want to visit the surface of the earth." She was shocked again.

"Mother, you must come, if only to explain to me what is the harm of visiting the surface of the earth."

"No harm," she replied, controlling herself. "But no advantage. The surface of the earth is only dust and mud, no advantage. The surface of the earth is only dust and mud, no life remains on it, and you would need a respirator, or the cold of the outer air would kill you. One dies immediately in the outer air."

"I know; of course I shall take all precautions."

"And besides —"

"Well?"

She considered, and chose her words with care. Her son had a queer temper, and she wished to dissuade him from the expedition.

"It is contrary to the spirit of the age," she asserted.

"Do you mean by that, contrary to the Machine?"

"In a sense, but —"

His image is the blue plate faded.

"Kuno!"

He had isolated himself.

For a moment Vashti felt lonely.

Then she generated the light, and the sight of her room, flooded with radiance and studded with electric buttons, revived her. There were buttons and switches everywhere — buttons to call for food for music, for clothing. There was the hot-bath button, by pressure of which a basin of (imitation) marble rose out of the floor, filled to the brim with a warm deodorized liquid. There was the cold-bath button. There was the button that produced literature. And there were of course the buttons by which she communicated with her friends. The room, though it contained nothing, was in touch with all that she cared for in the world.

Excerpt from *Missing Each Other by* Edward Brodkin and Ashley Pallathra (2021)

Exercises for Cultivating Your Ability to Listen

RELAXED AWARENESS WHILE LISTENING

Practice relaxed awareness while listening to someone speak to you. Many people will feel more comfortable sitting while listening to someone, but you could also do this while the two of you are standing. The goal of this exercise is to build directly on the still relaxed awareness exercises (sitting and standing meditation) and add a listening component. In the earlier sitting and standing meditation exercises, you went from an initial focus on your body alignment, breath awareness, and muscle relaxation to adding on an "open awareness" of your own thoughts and feelings and the surrounding environment. Now, as an additional step, you'll broaden that awareness to conversation. A one-way conversation (you listening to the other person) can give you the space you need to practice each component of relaxed awareness and listening without feeling the strain of having to respond to what the other person is saying. This practice should act as a foundation to help you utilize these steps when you're engaged in an active, two-way conversation.

Steps

1. Refer to the Sitting Meditation exercise in Chapter 2 to review the body posture and breathing techniques that should be used during this exercise. Use this link: https://missingeachother.com/exercises/
2. Ask your partner to talk to you for roughly two to five minutes about anything on their mind or about something that recently happened to them. While listening, use the same principles of posture and relaxed awareness that prior exercises have developed. You don't need to verbally respond back to them as they speak.
3. As you listen, try to put aside distractions; maintain your focus and concentration on what they are saying, with care, but not with intensity or strain. Notice not only the words they are saying but also their emotional expressiveness--their pace of speech, the tone of voice, their facial expression, and their body language.
4. Try to consider what they are saying and expressing to be the most important thing to you at this moment.
5. From time to time, try to "listen" or pay attention to yourself by checking in on your own posture and breath, and by noticing the sensations in your body, your thoughts,

and your emotions, much as you do in the sitting meditation. If it helps, set a timer for thirty seconds. When the timer goes off, check in on your posture, breath, and relaxation for a few seconds.

6. You may not agree with some things that the other person says, or you may even find them upsetting, but try not to get stuck on that or hold on to any of it. Instead, "stay with" the other person while they talk. If necessary, check in on your own posture, breath, and relaxation for a few seconds to help deal with any difficult emotions, and then try to return your attention to the other person. This process of momentarily returning to relaxed awareness is a kind of self-regulation routine that will help you to not feel so overwhelmed that you have to disengage completely from the exercise.

7. At the end of listening, if they are interested, allow your partner to practice listening as you speak to them.

SYNCHRONIZED WALKING

The goal of this exercise is to maintain relaxed awareness and "listen" to the other person while in motion with them. In Chapter 2, we learned a solo walking meditation exercise. In this next level of the walking exercise, in addition to awareness of our own body and the general environment, we extend our awareness to a partner who is also in motion, while maintaining physical coordination with that partner. This is an exercise to help you stay aware of the other person and yourself in a moving, changing situation. Initially, practice this with a trusted partner who understands that you are doing an exercise with them. Over time, you can try to discreetly use this exercise when walking with colleagues in the office or with friends on the way to get coffee or a meal together. Notice the way in which actively syncing with their pace impacts your communication and overall attunement with them.

Steps

1. First, both you and your partner should review the basic principles of the walking practice and relaxed awareness described in Chapter 2. Use this link: https://missingeachother.com/exercises/

2. You and your partner should stand with about one to two arms lengths between you, with both of you facing in the same direction.

3. For each walk, one person will be the leader and the other will be the follower.

4. The job of the follower is to pay careful attention to the leader, and to try to walk in sync with the leader (same foot moving in the same way at the same time)--not lagging behind, not anticipating (i.e., not being ahead of) the leader.

5. The leader should also maintain awareness of the follower so that there is a mutual awareness.
6. Initially, the leader should walk at a moderate, steady pace. It also helps to start with a "one, two, three, go" and know that both people will begin by stepping out with, say, the left foot first.
7. Once both parties are comfortable in walking at a steady pace, the leader can unpredictably change the walking pace. The job of the follower is to change pace along with the leader, while staying in sync in terms of which foot is moving.
8. As the follower tries to stay in sync with the leader, the follower may start to tense up because of the effort to pay attention. Instead, the follower should work on trying to remain relaxed and aware while trying to stay in sync.
9. If you get out of sync and have trouble getting back in, it's no problem. You can stop and begin again together.
10. Partners should change roles, with the leader becoming the follower. Try to practice this with several different partners, the more the better. Getting in sync will probably feel a little different with different people, and it may be easier or more challenging with different partners.

Excerpt from *Howards End* by E. M. Forster (1910)

"Only connect! That was the whole of her sermon. Only connect the prose and the passion, and both will be exalted, and human love will be seen at its height. Live in fragments no longer."

What Can In-Person Learning Teach Us About Human Relationships?

Excerpt from *Missing Each Other*
by Edward Brodkin and Ashley Pallathra (2021)

"We shall not cease from exploration
And the end of all our exploring
Will be to arrive where we started
And know the place for the first time."
—T.S. Eliot, "Little Gidding," *Four Quartets*

The Big Picture: Zooming Out

Writing this book has changed each of us. Before starting on this project, we passed our days in the way that many people do: quintessentially "busy." From the moment we each got out of bed and placed our feet on the ground, the day's conversations and interactions took off and subsequently went by in a blur. We spent much of the day trying to field everything that came at us—the passing interactions, meetings, emails, texts, and social media posts. We weren't always the best listeners. Often, when our buttons were pushed, we would react emotionally rather than responding thoughtfully. And we wouldn't have a chance to think over the nuances of the day's interactions until we were back home, laying our heads down to go to sleep and finally catching a truly mindful moment before drifting off.

But as we worked on our research together and then began writing this book, we started to think more and more about why people seem to miss each other so much of the time, and why they're sometimes—too rarely—able to really connect. People in our field of autism research talk quite a bit about "social skills" as the prime target for improving people's abilities to connect. But we wanted to go beyond a long list of skills and social scripts. We asked ourselves what the key ingredient of human connection is when it's distilled to its essence. The concept of attunement started to take shape in our minds as what

makes the difference between connecting and passing each other by. Initially, it was only an academic concept that we had seen used in research on mother-infant bonding, and not one that we thought of in relation to our daily lives. But the more we thought and wrote about it, the more we saw moments of attunement, or misattunement, manifesting everywhere, in virtually all types of interactions and relationships.

As we developed the exercises described in Chapters 2 through 5, we started to practice them ourselves, and we tried to integrate them into our work and personal lives. As we practiced them regularly, they started to become new habits, and we formed what we can best describe as a "muscle memory" for them. For example, now, before walking into a potentially stressful meeting, we instinctively and discretely do a relaxed awareness exercise-- head gently suspended from above, shoulders relaxed down, breathing in and feeling our belly expand. Very quickly, within a breath or two, we feel calmer but still aware and alert. We feel more ready to handle anything that might come our way. Before the meeting starts, we remind ourselves to relax, listen, try to understand, and set our ego aside. Rather than getting caught up in worries about the outcome of the encounter, we try to focus on meeting the other person where they are, keeping our responses on target, and staying in the flow. And we've found that focusing on those elements of attunement, rather than potential outcomes, makes the desired result from the meeting more likely. As we developed these new habits, there were increasingly more moments throughout the day in which we felt like we were truly present and could genuinely "make contact" with ourselves and another person, regardless of whether it was a pleasant, neutral, or stressful situation. We're still far from being models of perfection in the art of attunement, but things have moved in a more positive direction. We keep working on it, trying to make it a more central part of our lives. There's no limit to how much you can develop this in yourself. Because we've seen the benefits, attunement has become an important value in our lives, something we will continue to cultivate—and something we want to share with you.

Our hope is that we've described this concept in a way that resonates with you. While attunement can sometimes seem intangible, we want to distill it in a way that is a little bit easier to wrap your head around. While the four components of attunement are interconnected and work together, it's often easier to remember them in sequence. First, strengthen *relaxed awareness*. This is your foundation, a state of mind where you can feel centered and at home, regardless of what's happening around you—what T. S. Eliot called "the still point of the turning world." This fundamental ability allows you to direct attention and nonjudgmental compassion toward your own thoughts and feelings, while also balancing this with awareness of the other person. Only then can we be ready to embark on genuine *listening*, which, in the broadest sense of the term, means being open to perceiving all that the other person is communicating to you through both their words and actions. When you have relaxed awareness, and don't feel so apprehensive about what you might perceive from the

other person, then you're ready to receive whatever they are trying to communicate—be it good, bad, or somewhere in between. Attentive listening births deep *understanding*, which often involves more than just understanding the words the other person says. It also includes understanding their point of view and your own, in addition to each of your own personal "filters" through which you communicate and "hear" one another. Relaxed awareness, listening, and understanding lay the groundwork for what actually happens between us— *mutual responsiveness*, the intricacies of which bring fluidityand cohesion to the back-and-forth exchange of conversation. We hope that the exercises we offer you can give you a more concrete sense of what these concepts are like when they are put into action, and we hope that you can take that same kind of "muscle memory" that we described off the yoga mat or couch at home and utilize it during all the ups and downs of your busy days. The more you start to integrate these practices into your routine with consistency, the more moments of connection you will recover per day.

Excerpts from "Burnt Norton" by T.S. Eliot

The Four Quartets (1936)

At the still point of the turning world. Neither flesh nor
      fleshless;
Neither from nor towards; at the still point, there the dance
      is,
But neither arrest nor movement. And do not call it fixity,
Where past and future are gathered. Neither movement
      from nor towards,
Neither ascent nor decline. Except for the point, the still
      point,
There would be no dance, and there is only the dance.
I can only say, *there* we have been: but I cannot say where.
And I cannot say, how long, for that is to place it in time.

…

After the kingfisher's wing
Has answered light to light, and is silent, the light is
still At the still point of the turning world.

Excerpts from "The Dry Salvages" by T.S. Eliot

The Four Quartets (1941)

These are only hints and guesses,
Hints followed by guesses; and the rest
Is prayer, observance, discipline, thought and action.
The hint half guessed, the gift half understood, is
Incarnation.
Here the impossible union
Of spheres of existence is actual,
Here the past and future
Are conquered, and reconciled,
Where action were otherwise
movement Of that which is only
moved
And has in it no source of movement—
Driven by daemonic, chthonic
Powers. And right action is
freedom From past and future
also.
For most of us, this is the aim
Never here to be realised;
Who are only undefeated
Because we have gone on trying;
We, content at the last
If our temporal reversion
nourish (Not too far from the
yew-tree) The life of significant
soil.

Excerpts from "Little Gidding" by T.S. Eliot

The Four Quartets (1942)

And all shall be well and
All manner of thing shall be well
By the purification of the motive
In the ground of our beseeching.

…

With the drawing of this Love and the voice of this Calling

We shall not cease from exploration
And the end of all our exploring
Will be to arrive where we started
And know the place for the first
time.
Through the unknown, remembered gate
When the last of earth left to discover
Is that which was the beginning;
At the source of the longest river
The voice of the hidden waterfall
And the children in the apple-tree
Not known, because not looked for
But heard, half-heard, in the
stillness Between two waves of the
sea.
Quick now, here, now, always—
A condition of complete
simplicity
(Costing not less than everything)
And all shall be well and
All manner of things shall be well
When the tongues of flame are in-folded
Into the crowned knot of fire
And the fire and the rose are one.

Excerpts from *The Rise and Progress of Universities* by John Henry Newman (1856)

If we wish to become exact and fully furnished in any branch of knowledge which is diversified and complicated, we must consult living [persons] and listen to [their living voices]... No books can get through the number of minute questions which it is possible to ask on any extended subject, or can hit upon the very difficulties which are severally felt by each reader in succession. Or again...no book can convey the special spirit and delicate peculiarities of its subject with that rapidity and certainty which attend on the sympathy of mind with mind, through the eyes, the look, the accent, and the manner, in casual expressions thrown off at the moment, and the unstudied turns of familiar conversation...

Whatever be the cause, the fact is undeniable. The general principles of any study you may learn by books at home; but the detail, the colour, the tone, the air, the life which makes it live in us, you must catch all these from those in whom it lives already. You must imitate the student in French or German, who is not content with [their] grammar, but goes to Paris or Dresden: you must take example from the young artist, who aspires to visit the great Masters in Florence and in Rome. Till we have discovered some intellectual daguerreotype, which takes off the course of thought, and the form, lineaments, and features of truth, as completely and minutely, as the optical instrument reproduces the sensible object, we must come to the teachers of wisdom to learn wisdom, we must repair to the fountain, and drink there. Portions of it may go from thence to the ends of the earth by means of books; but the fulness is in one place alone. It is in such assemblages and congregations of intellect that books themselves, the masterpieces of human genius, are written, or at least originated.