**Welcome, Freshman.**

**Look at Me When I Talk to You.**

*Jonathan Zimmerman*

Join student clubs. Go to your professor’s office hours. If you’re feeling down, talk with someone about it. And please, don’t drink too much.

Welcome to the typical freshman orientation at an American college, where we hand out advice like candy. But here’s one piece of wisdom our newcomers don’t hear nearly enough: Close your windows.

I’m talking about those distracting windows on your computer. A sizable body of research shows that people learn and perform much better when they focus on one thing at a time. Isn’t that something every freshman should know?

Ditto for research about reading, which indicates that you retain more when you read in print than on a screen. As more and more course material goes online, we need to let our students in on that little secret.

For the most part, though, we don’t. When it comes to all matters digital, there’s a sense that the train has already left the station. We should all be on board, encouraging more engagement with these technologies rather than less.

That’s abdication, not education. Surely digital technologies have great potential to enhance student learning. But they also present dangers, which we should explain when digital natives arrive on campus.

Start with multitasking, which is one of the great myths of contemporary life. Most of us believe that we can do several activities simultaneously with the same efficiency as if we did them one at a time.

But we’re wrong. The late Stanford professor Clifford Nass spent his career testing multitaskers, who told him — over and over again — that they were good at it. His [research showed](http://www.npr.org/2013/05/10/182861382/the-myth-of-multitasking) the opposite: They’re chronically distracted, which inhibits their performance in everything they do.

Indeed, Nass found, people who multitask infrequently are actually better at it than those who do it all the time. That’s because multitasking shortens our attention span. Some psychologists have even suggested that it’s “rewiring” our brains to prevent us from concentrating, especially on written texts that are longer than a tweet or an instant message.

There’s also plenty of evidence that we read less carefully on screens than in print, even when we’re not doing other things at the same time. Experiments with eye trackers, which follow your eyes while you read, have demonstrated that we tend to [skim more on screens](https://www.nngroup.com/articles/f-shaped-pattern-reading-web-content/). Other researchers have shown that scrolling creates more distraction than flipping a page, which helps explain why most of us retain more from a printed text than from a digital one.

In class, people [learn less when someone near them is surfing](http://www.sciencedirect.com/science/article/pii/S0360131512002254) the web; the temptation to follow what’s on the screen, rather than what’s happening in the class, is simply too great. When I found that out, I banned laptops from my classroom. You can distract yourself, if you so choose, but you have no right to distract somebody else.

Even if you’re not tooling around the internet, laptops can inhibit your learning. Students who take notes on computers often try to record every word instead of making the important cognitive judgments — Do I write this down or not? — that pen-and-paper note-taking requires. Some professors report that students are annoyed when they are asked questions because it interrupts their harried transcription of the class. That’s not education; it’s dictation.

Some frightening data suggests that habitual computer activity, especially on social media, hampers our social and emotional development, particularly our ability to empathize with others. Clifford Nass saw this firsthand while serving as a dorm adviser at Stanford, where he urged students to turn off their devices and converse directly with one another.

“We’ve got to make face-to-face time sacred,” Nass told a Stanford audience in 2013, a few months before he died, “and we have to bring back the saying we used to hear all the time and now never hear: ‘Look at me when I talk to you.’ "

It’s hard to know why our colleges have been so slow to share this information with our students. Part of the reason probably stems from America’s obsession with progress, especially in technology, which assumes that the next big thing is always the best thing.

But there’s also an element of cynical self-interest at work. Many of our institutions have invested heavily in online education, which promises to teach more and more people at a fraction of the cost. How can we warn about the limits of digital learning while we’re simultaneously touting online courses and programs?

The answer is simple: Use what we know to help our students learn as much as they can. Tell them to turn off every program except the one they’re using, so they minimize distractions. And provide free printers wherever possible, so students don’t have to read everything on screens.

Most of all, tell them to get out more. In a [2009 survey](https://books.google.com/books?id=-e2t7HxysHIC&pg=PT69&lpg=PT69&dq=%22I+pretty+much+keep+to+myself+socially%22&source=bl&ots=dg7ZNBTerC&sig=BeJzV3gPUu2ZXkuZE0vLRO-KlZc&hl=en&sa=X&ved=0ahUKEwitnKvT_-7OAhXGOiYKHTtODC4Q6AEIHDAA#v=onepage&q=%22I%20pretty%20much%20keep%20to%20myself%20socially%22&f=false), more than half of community-college students and a third of four-year students agreed with the statement, “I pretty much keep to myself socially.” Many students prefer the anonymity of the internet to the messy work of face-to-face communication, with its unpredictable rhythms and awkward silences.

But that’s all the more reason to urge them to take their eyes off their phones and laptops. Employers increasingly report that they want workers with “soft skills,” like problem solving and getting along with others. Our students won’t learn much of that by sitting in front of their screens.

And they won’t learn nearly as much in college — from one another or from us — if they’re living online. That’s not an opinion; it’s a fact. Hiding it from our students is worse than embarrassing, to our profession and ourselves. It’s malpractice.

*Jonathan Zimmerman, “Welcome Freshman. Look at Me When I Talk to You.” Chronicle of Higher Education, September 11, 2016.*

**Focused Reading**

Actively bring what you are reading about into the structures of your mind. This is both a ‘pre-reading’ activity and a ‘during reading’ activity.

Text:

Chapter:

Pages:

Write the concepts or questions you are focusing on here:

|  |  |
| --- | --- |
| Focused Questions:  | Answer to the question, and where in the reading you found information about your focused question: (page #, paragraph, etc.) |
| Concept/Question 1:  |  |  |
| Concept/Question 2: |  |  |
| Concept/Question 3: |  |  |
| Concept/Question 4: |  |  |
| Concept/Question 5: |  |  |

**What is an Element?**

An element is a purse substance that cannot be broken down into simpler substances, with different properties, by physical or chemical means. The elements are the basic building blocks of all matter.

**Three Types of Elements**

Elements can be classified into three types, depending on their properties: metals, nonmetals, and metalloids.

*Element Type 1: Metals*

Examples of metallic elements are sodium (which has the symbol Na), calcium (Cs), iron (Fe), cobalt (Co), and silver (Ag). These elements are all classified as metals because they have luster, they conduct electricity well, they conduct heat well, and they are malleable.

*Element Type 2: Nonmetals*

Some examples of nonmetals are chlorine, which has the symbol Cl, oxygen (O), carbon ©, and sulfur (S). These elements are classified as nonmetals because they don’t shine they don’t conduct electricity well, they don’t conduct heat well, and they are not malleable.

*Element Type 3: Metalloids*

Metalloids have some properties like those of metals and other properties like those of nonmetals. Some examples are arsenic (As), germanium (Ge), and silicon (Si). These particular metalloids are used in manufacturing transistors and other semiconductor devices.

*Adapted from Nist & Diehl, 2022, 355-56.*

**Strategy: Activating Schema to Predict**

Text:

Chapter:

Pages:

|  |
| --- |
| Using a chart to practice your predictions will help you to formalize your thoughts. Make connections to the chapter by linking the content to what you already know. Your predictions can be used to check your thoughts with and against the text.  |

|  |  |  |
| --- | --- | --- |
| **Headings / Subheadings** | Write Your **Predictions** Based on Your Schema Here | Take **Notes** Here After Reading Each Section. Also, Note whether the Information that You Predicted is Included in the Section or Not.  |
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**Chapter Textbook Analysis**

Complete this by previewing a chapter in your textbook from a course you are taking and examining the structure. Use the chart to comment on notable features. Plan how to read this chapter and consider how you feel about reading it now that you understand the structure.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Describe the chapter structure: length, section length, notable features | Describe chapter beginning and end:Introduction?Conclusion?Other? | Describe section structure: | Describe special features within the chapter: | Describe study aids: |
|  |  |  |  |  |

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| --- |
| Strategic plan: |
| Overall reaction: |