

You Need Technology to Survive Graduate School

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A Google search anthropologist reported that 90% of the population did not know what CTRL/Command + F does (Madrigal, 2011). Yes, you read that right. Hopefully that number has decreased by now, but if you are part of the majority, stop what you're doing and try it. It allows you to search for any term on nearly any page of any application or browser you have on your computer. When you have more work than you can do in a day, shortcuts like this one can be game changers.

In this article, we will introduce you to some of the key applications that we use to survive graduate school. Plus, we include the part you really care about — the cost. Many of these apps have free trials, or even free versions, but consider them with an open mind, because some of them are really worth digging into your pockets for.

First things first: if you have never had a computer crash on you before, your day is coming. It happens to all of us at the worst possible moments. *Back everything up. We mean everything.*

Backups: The Cloud

When your advisor was in graduate school, he or she backed up data, documents, and writing onto floppy disks and CD-ROMs. Flash drives provided the next step in this storage evolution, but they require manual updates, are often too small, and are usually collocated with your computer, making them susceptible to any physical disasters that may be inflicted upon your computer.

Although many solutions exist, your first backup option is the cloud. Cloud-based storage is a system whereby a service provider (e.g., Dropbox) provides storage of your information on computers (servers) that are remote from you and accessible via the Internet (Zeng, Zhao, Ou, & Song, 2009). Whether you use Google Drive, Dropbox, iCloud, or Box.com (or many, many others), cloud-based storage offers three significant benefits: (1) backups can update automatically, (2) backups are offsite, and (3) the service is affordable.

These cloud-based services can be tied to your computer's file storage system so that they automatically send your documents to the service provider. There is no need to reupload the documents as long as you save all of your files in folders that are tied to cloud storage. You'll be saved if your computer crashes.

Collaboration: Google Drive or Dropbox

These cloud-based storage providers not only provide backup storage, but also provide important collaboration tools, allowing you to share documents easily without back-and-forth emails, collaborate with colleagues in real time, and avoid conflicting copies.

Google Drive appears to have the best tools for real-time collaboration, allowing colleagues to access the same document simultaneously. (Think of Ginny Weasley and Tom Riddle simultaneously writing in his diary.) Changes are saved nearly instantaneously, and conflicted copies are never created. The only downside is that you must use Google's applications (Google Docs, Google Sheets, etc.) to collaborate. Dropbox does not yet support real-time collaboration (though it is getting closer, and does let you know when others are editing the same document), and it is still useful for file sharing and nonsimultaneous collaboration. An advantage of Dropbox is that the files reside natively on your computer, and no set up is required to work with them when you are not connected to the Internet. Additionally, Dropbox is format agnostic — that is, it doesn't care what format your file is in to support collaboration.

Cost:

Google Drive: 15 GB for free, 100 GB for \$1.99/month, and 1 TB for \$9.99/month

Dropbox: 2 GB for free, 1 TB for \$8.25/month if billed annually (\$10/month if billed monthly)

Evernote

In college, did you take all of your notes by hand or save them in Microsoft Word? If you used Word, were they were all named "10/16 notes" or something horribly generic, which meant you had to open at least seven different documents before finding the notes you were looking for? This problem is not worth your time in graduate school. Evernote can be your solution. The magic of Evernote is its search function. It is a great way to combine notes from classes, research projects, teaching, meetings with your advisor, and lab meetings.

Cost:

Basic for free, Plus for \$34.99/year, and Premium for \$69.99/year

Task Managers: Todoist and Omnifocus

Trying to remember everything you have to do takes up a lot of cognitive space that can be better spent trying to figure out which Starbucks will have the shortest line. Although a paper and pencil task list is a good start, a to-do app is better. There are dozens of to-do list apps out there, but we want to focus on two.

First, Todoist allows you to create normal task lists, as well as projects (e.g., Teaching, Classes, Research). It includes filters that let you only look at what's due this week or this month. It also gives you the ability to set priorities and will integrate with all of your other favorite apps. You can also set priorities, so there is a difference between "I should do that at some point" and "I have a paper due next week" without letting you lose track of the things in the "should do" category. For this application, we definitely suggest getting the premium version.

Omnifocus has many of the same features as Todoist but takes it one step further. Now, you can embed projects within one another, defer tasks into the future, and even set interdependencies among project

steps. There are few things more discouraging than seeing a list of 100 things that you need to do. Through deferment and dependencies, you only have to look at the list of tasks that you are going to work on today.

Cost:

Todoist: Basic for free, Premium for \$28.99/year

Omnifocus: Basic license for \$24.99 (education discount), Pro license for \$49.99 (education discount)

Writing: Scrivener

Microsoft Word is great for formatting documents for printing, but there are better options out there for the writing process. Scrivener can help you to not only format your work, but also to structure and organize it, and it provides a place to keep your supporting literature and information. With an intuitive workspace, you can easily isolate sections of your paper to work on, jump between sections, drag and drop sections around the paper, and even see two sections at the same time in the same window. If you are writing anything from comprehensive exam answers, to a class paper, to a dissertation, to a book chapter, this is worth a look.

Cost:

\$38.25 for Mac (education discount) or \$35 for Windows (education discount)

There are dozens (arguably hundreds) of other useful apps and computer shortcuts that will help increase your productivity and your efficiency. These are the few you should get started with immediately, if you have not implemented them already.

Note: Parts of this article have been adapted from the fall 2016 version of the [George Mason University I/ON Newsletter](#). æ

References and Further Reading

Madrigal, A. C. (2011, August 18). Crazy: 90 percent of people don't know how to use ctrl+f. *The Atlantic*. Retrieved from <http://www.theatlantic.com/technology/archive/2011/08/crazy-90-percent-of-people-dont-know-how-to-use-ctrl-f/243840/>

Zeng, W., Zhao, Y., Ou, K., & Song, W. (2009). Research on cloud storage architecture and key technologies. In *Proceedings of the 2nd international conference on interaction sciences: information technology, culture and human* (pp. 1044–1048). New York, NY: ACM. doi:10.1145/1655925.1656114

en.todoist.com/

evernote.com/

www.dropbox.com/business/

www.google.com/drive/

www.literatureandlatte.com/

www.omnigroup.com/omnifocus