

## TechMatters: Dropbox: Storing and Sharing Information in the Cloud

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As instruction librarians, we spend a great deal of time and effort developing, writing, and editing instructional materials for use in our classes. It is not uncommon when working on one of these documents to end up moving from location to location (e.g., office, reference desk, home) and completing our work using a variety of different devices and platforms (e.g., PCs, laptops, smartphones). In addition, we often collaborate on the creation of these materials with our colleagues and so need to share documents in progress with one another.

In the past, we managed this type of work by e-mailing attachments to ourselves and one another, storing materials on portable devices such as flash drives in order to transfer documents from location to location and device to device, and/or utilizing purely online document creation and editing tools (e.g., Google Docs, wikis) that lacked some of the functionality of full-featured productivity software. Fortunately, in the last few years a number of free, online document storage and sharing tools have been developed to facilitate collaborative and location-variable work. One such tool that I have recently discovered, (and quickly grown to love), is Dropbox (<http://www.dropbox.com/>).

### What is Dropbox?

Dropbox is a software application and web service that currently provides 2GB of free online storage (larger sizes are available for a monthly fee). Dropbox allows you to access and update your files from any location using any computer, as well as several of the most popular mobile devices (iPhone, iPad, BlackBerry, and Android).

In order to use all of the features of Dropbox, you do need to download and install the software on each of the devices via which you wish to directly access and update your documents. As part of the installation process, you will be prompted the first time to setup a new Dropbox account and for each additional device to which you install the software client, to enter your now-existing account information. All that is required to setup an account is your name, an e-mail address, and a password of your choosing. Beyond accessing the files on the hard drives of your various Dropbox-enabled devices, once you have a Dropbox account, you can also access your files via the Dropbox web site. This means that you can access your files from any internet connected device that has a web browser without installing the software application.

### How does it Work?

Once installed, Dropbox creates its own special folder

on your device (see Figure 1). Any file that you copy or move into this folder is then automatically uploaded to your free online storage area. From that point, a copy of the file is immediately downloaded to any of the other internet connected devices on which you have installed and configured Dropbox. If a particular device is offline, the file will be updated as soon as it reconnects to the network. This same process occurs as you edit your documents. Each time you save a change the file is copied and saved to each of your Dropbox enabled devices, as well as the web.

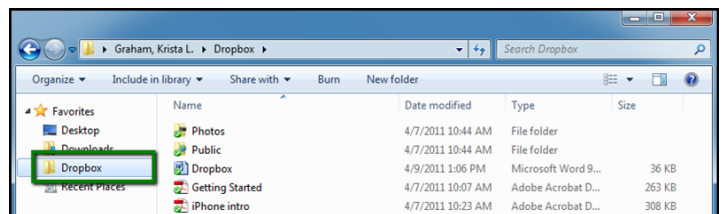


Figure 1: Dropbox folder on a local PC contains all stored and shared files.

Although you can technically create a Dropbox account without downloading the software onto your local computer/iPad/phone, doing so means that you will only be able to use the web version of the application (see Figure 2). The primary disadvantage of this approach is that you will only be able to access and work with your files while you are online. From my perspective, the real advantage to downloading and installing the application lies in the fact that you can work on a document when you are disconnected from the Internet, and then when you reconnect all of your edits are automatically distributed to your other devices. Of course, this does mean that a separate copy of each document is stored on each machine, so if space is a concern you might want to think twice before installing the local application on a device with limited memory.

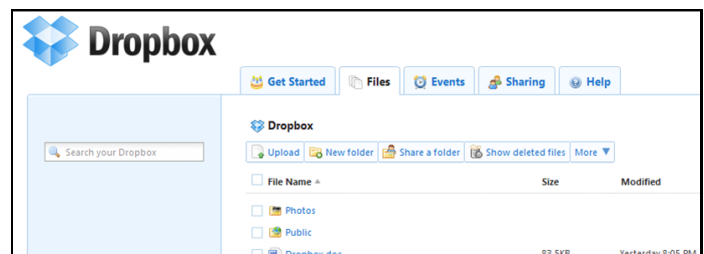
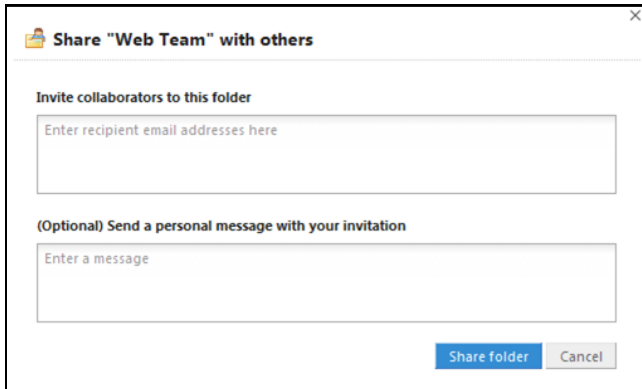


Figure 2: Web interface for Dropbox.

### Sharing Files Via Dropbox

Dropbox is ideal for collaborative projects as it allows you to share folders easily with other Dropbox users. To do so, you simply create a new folder using either the “New folder” button in the web interface or using the file management system on your local computer, and then you use the

“Share a folder” option to select other users and send them an invitation e-mail (see Figure 3). If they are not Dropbox users, they will be prompted to create an account. Once they accept, they will be able to access and update the files in the shared folder and, if they take the extra step of installing the software on their computer/tablet/phone, be able to also make edits that are instantaneously shared with everyone who is a member of the folder.



**Figure 3: Invite others to share and collaborate in the editing of documents.**

Alternately, you can use the “Public” folder to share documents with those who are not Dropbox users. To do so, simply place a file in the “Public” folder, and then use the “copy public link” option to get a URL that you can send to any user via e-mail or instant message. However, if you use this option other users will only be able to view and save your shared documents. They won’t be able to co-edit and send a revised version back to the Dropbox folder.

### **A Comment on Privacy and Security**

While Dropbox, and other “cloud” computer based tools are quite useful, there are often understandable concerns about your files being “out there” (in this case, on servers managed by Amazon) and thus being more vulnerable even if they are in password-protected accounts. For example, if you have the Dropbox client software application installed on your iPad and it is lost or stolen, does the thief now have access to all your Dropbox files? In short, assuming your iPad itself isn’t password-protected, yes. But with the increased mobility of files, this is no different than losing your laptop (or iPad, or phone), or perhaps more commonly, losing a USB Flash drive that you tote home every night to do some work.

My recommendation is to use Dropbox, but use it wisely: no information with social security numbers, student IDs, or other private information should be stored in a Dropbox folder. It’s very unlikely something could happen, but better safe than sorry. However, that still leaves a lot of possible files: articles you are writing for publication, presentations & handouts you are creating for class, lesson plans you are developing, etc. By using good judgment, Dropbox

can be a useful tool where security is not ultimately a concern, so if you lose your phone or laptop, you are worried about getting it back for its own sake, but not worried a thief will be rummaging through your Dropbox folder because why would they care? (unless they want to critique your in-progress lesson plan for English 101)

### **A Few Possible Uses for Library Instructors and/or Instruction**

#### *Create a Repository of Shared Learning Objects*

Interested in sharing lesson plans, assignments, and worksheets with your colleagues either in your own library or even at other institutions? Use Dropbox to create a shared folder into which you can all deposit, access, and share your ideas.

#### *Collaborate on the Development or Revision of Curriculum*

For those teaching credit-bearing courses in an academic environment, or for those with a more formal information literacy curriculum, you may be required to review and update your curricular documents on a regular basis. In some cases, this work may be done by committee and if so, Dropbox can provide you with an easy way to distribute, review, and even edit those materials with a group of colleagues.

#### *Create a Space for Students to Develop a Shared Repository of Research Articles*

For an assignment in a research skills class, have students work together to search for and gather a shared collection of articles on a particular topic. Setup a shared Dropbox folder for each group of students, and have them deposit their choices into their folder. As they collect their resources, you can monitor their progress, and even suggest ways they might improve their results if you find they are getting off track.

#### *Store and Access Your Files When You Travel*

Presenting at the LOEX Conference, and want to make sure you have an easily accessible back-up copy of your presentation available? Use Dropbox to store a copy in the cloud. Best of all, provided you have internet access, you can continue to make changes to the version on your laptop as you travel and your back-up copy will remain in sync with your working version. Then, should something go wrong with your computer, you will be able to access a pristine copy of your finalized presentation.

There are just a few of the ways that you can use Dropbox to support your instructional activities and goals. Grab a copy of your own, start experimenting, and before you know I predict that you’ll discover your own ways to use this tool to make your work a bit easier!