THE ULTIMATE GUIDE TO THE PARTITION TO T



BRITTANY LEHANE & CAL BRUNELL

Co-founders, Everyday Speech

TABLE OF CONTENTS

GETTING STARTED	1
Setting Up Your iPad	2
Dissecting the iPad	4
Customizing Your Experience	9
APPS 101	13
What is an App?	14
Navigating the App Store	16
Viewing and Downloading Apps	22
Where can I Research Apps to Buy?	24
MASTERING THE IPAD IN SPECIAL ED	26
General Settings for Special Education	27
Vision Accessibility Features	27
Hearing Accessibility Features	29
The Holy Grail: Guided Access	29
Physical & Motor Accessibility Features	32
Voice Dictation & Siri	33
Coming Soon: iOS 8	34
OUR FAVORITE APPS	36
Apps for Communication	37
Customizable Communication Apps	40
Language Apps	41
Apps for All Students	42
CONCLUSION	44
ABOUT THE AUTHORS	45
GLOSSARY OF TERMS	46

ver the last couple of years, the Special Education experience has been transformed by a small device that has revolutionized the way we interact with our students and children: the iPad. Sleek, flexible, and incredibly interactive, the iPad has opened up a world of opportunity for those that may struggle with the traditional repetitive teaching model of pen and paper.

Studies are starting to come in saying that the iPad helps children who have Autism develop language and increases academic engagement when compared to traditional models. This has led professionals, including Speech Language Pathologists and Special Education Teachers, and parents to buy the iPad in incredible numbers.

Just how much has the iPad been adopted by US schools? Well, according to Apple, 95% of all tablets in US schools are iPads¹! The tablet revolution made a huge impact on special education spending as well. From 2012 to 2013, digital resources for special education grew 80%!² And we're just at the tip of the iceberg. Worldwide, the number of students with access to a mobile computing device is expected to double by 2017.³

What does all this mean? Well, if you think the iPad is important now, wait until you see what happens over the next 5 years. It seems the tablet is here to stay. As schools transition from paper based learning materials to interactive digital content, fluency in using the iPad will be critical to a teacher or therapist's success.

That's we're we come in. This eBook contains tips and tricks for anyone using the iPad for special education, whether that's at school or at home. This book is designed to be all inclusive: if you're just getting an iPad, you think you're an iPad master, or you're somewhere in between, we've got something for you.

How is this book organized?

We'll start off by walking you through the foundation: what is an iPad and how does it work? We'll tell you how to customize your iPad so you can work quickly and efficiently. After that, we'll get into the basics of finding, buying, and downloading "apps". We'll then jump into some settings that Apple has developed specifically for special education users – these will blow your mind, we promise. To close, we'll share some of our favorite apps for speech & language, communication and productivity.

We've set this book up in a way that each section can stand on its own. If you feel like you have all the basics down, you can jump right in at whatever point you feel comfortable. If we refer to something you aren't familiar with, you can easily flip back to find the initial discussion. You can also always look in the glossary at the end of this book.

¹ http://www.macrumors.com/2014/04/23/ipad-high-end-expectations-2-3-users-new/

²http://www.edweek.org/ew/articles/2014/01/22/18edmarket.h33.html?r=61853086

³http://www.futuresource-consulting.com/2013-09-education_iOS7.html

Throughout this text, we'll refer to settings and features that take multiple taps to get to. Those taps will be shown as $Tap\ 1 -> Tap\ 2 -> \dots -> Destination$. For example, to invert the colors on your iPad (a feature for the visually impaired discussed later), you first tap on Settings, then General, then Accessibility, then Invert colors. That will be shown as Settings -> General -> Accessibility -> Invert Colors.

In some cases, we'll refer to a function or a setting that we don't discuss in detail. In those cases, we'll link to supporting documents from Apple's website or other sources to get you the information you need.

This eBook is a living document; we're always looking for feedback from our readers. If there's anything in this book that isn't clear or you think needs expanding, or there are great apps that you use all the time that we didn't cover, let us know by contacting us here. You can also reach us on Twitter and Facebook. Happy reading!

GETTING STARTED







GETTING STARTED

So you've just received an iPad – you've heard about how great it is both at school and at home. You have visions of smoother therapy sessions and quick Google searches on the go. But wait! You suddenly realize you have no idea how to use it! What do all those buttons do? Why is this thing asking me 100 different questions before I can even use it? What in the world is iOS?

If some of these thoughts are running through your mind, this section is for you. In *Setting Up Your iPad*, we'll discuss the set up process so you can get started working on your new iPad quickly without worrying what all the customization options do. Even if you've already set up your iPad, it's still worth checking this section out, as we'll define some key terms like **Apple ID**, **Location Services**, **iCloud**, and **iMessage**.

Our next two sections, *Dissecting the iPad* and *Customizing Your Experience*, will teach you what all the buttons on the iPad do – including some options you probably didn't know existed. You'll also find out how to quickly navigate your iPad like a pro and you'll learn about general settings that can really improve your experience.



Setting Up Your iPad

If you're just getting an iPad for the first time, or need to set up a new one – this section walks you through the different steps and settings you can choose during the set up process. If you've already set up your iPad and are generally familiar with the terms **Apple ID**, **iCloud**, **and iMessage**, you can move on to our next section, "<u>Dissecting the iPad</u>".

It's helpful if you set up your iPad in a place where you can connect to Wi-Fi, because some of the steps require an internet connection.

Please note that this process is subject to change, so if you're having difficulty getting set up – please refer to <u>Apple's documentation on their website.</u>

When you first turn your iPad on, you should see a white screen with different languages welcoming you to your new iPad. Let's swipe to the right on the screen to get started!

- 1. You'll have to choose your **Default Language**, which if you're reading this, is presumably English! You can then set the **Default Country** you live in. It's important you put accurate information in for the country, because the app store and your **Apple ID**, discussed later, are based on your home country.
- 2. Choose a **Wi-Fi network** and enter the password. Your iPad can connect to local Wi-fi networks and does not need a cellular plan to access the internet.
- 3. Decide whether you want to enable **Location Services**. *Location Services* uses your internet connection to figure out where you are in the world, which is helpful for some websites and apps. If you're using Yelp to search for restaurants, location services will allow the device to search in your local area. If you're using an app to check the weather, the app will automatically look in your local area. Turning on location services is generally a good idea, because you can always turn it off later or prohibit specific apps from using it, but turning it on isn't not necessary to use the iPad.
- 4. **Set up as New** or **Restore from Backup**. If you're getting an iPad for the first time, you will be setting the iPad up as new. If you have previously owned an iPad and want to get your saved **backup** (discussed here) so that your iPad will have your saved apps, photos, and other data, you would choose "restore from backup". If you want, you can also restore from an iPhone backup, so that all of your preferences and apps from your phone are automatically included with your iPad. If you have a backup set up on **iCloud**, you can enter in your credentials here. If you are restoring from iTunes, you'll have to connect your device to the computer with iTunes using the attached USB cable that you use for charging.
- 5. **Create your Apple ID** or **Enter** an existing one. Your *Apple ID* is your personal identifier for using Apple products. You use your *Apple ID* to download apps, sync data across devices, and do anything else that requires your personal information. Use your primary email as your *Apple ID*, and create a password. You can add a credit card to your Apple ID so you don't have to enter in the number every time you want to

- purchase an app, you can simply enter in your password. **Note:** If your iPad was provided by your employer, they may have an *Apple ID* they want you to use.
- 6. After you **agree to the Terms & Conditions**, you can **Set Up iCloud**. iCloud is Apple's *cloud backup system*. All that means is that Apple will save some of your files on the internet, so if you ever lose your iPad, it stops working, or you buy a new one, your data is saved and you can **restore** the new iPad, as discussed in step 4. You can set up iCloud to back up all your data, including photos, calendars, messages, apps, and music. iCloud backup runs automatically when your iPad is charging and connected to Wi-Fi.
- 7. **Find my iPad** uses location services to tell you where your iPad is if you've lost it. In the event you lose it, you can log onto the iCloud website using your Apple ID to see if you can track it down.
- 8. If you want to use your iPad for **FaceTime**, which is Apple's video calling service, and **iMessage**, which is a text messaging service, you can allow people to reach you at your Apple ID. If someone has an iPhone or iPad and sends an iMessage to your email address, it will appear on your iPad! Please note that by default, Apple devices use iMessage instead of text messaging when sending to other Apple devices, so there's nothing special you need to do to set that up. Unfortunately, you can't send iMessages to people using Android devices. **Note:** If you have an iPhone already associated with your Apple ID, you will see your phone number listed there as well. If your phone number is selected, the iMessages you receive on your phone will automatically appear in your iPad. If your iPad is going to be used by multiple people, you will probably want to disable your phone number, otherwise your personal conversations from your phone will appear on the iPad.
- 9. Optionally, you can **Create a Passcode**. A simple passcode is a 4 digit number that you enter every time you want to use the iPad. This is advantageous because if you ever lose your iPad, whoever finds it won't have access to any sensitive information you might have on the iPad. It's important you remember your passcode, because if you get locked out, you'll either have to connect to iTunes to restore your device or remotely delete the data and set it up again.
- 10. Decide whether you want to use **Siri**. Siri is your iPad's virtual assistant, which you can use to send voice commands to perform tasks and look up information. For example, you can ask Siri "What's the weather like today?", and Siri will look up the forecast for you. For a long list of Siri commands, visit this <u>link</u>. There's really no reason not to have Siri enabled, so we suggest keeping it on.
- 11. Choose whether or not you want to send **Diagnostic Reports** to Apple (totally optional, this sends Apple information about the performance of your device so they can make improvements to future iPads), and you're ready to **Get Started!** Your new iPad is set up and ready to use.

Dissecting the iPad

You might think that once you set up your iPad, your experience will be the same as everyone else. Unfortunately, it's a little more complicated than that! Different iPad models have access to different features and settings, and different Operating Systems (known as **iOS**) provide all different types of experiences. Apps may run differently on your iPad than other versions, or you might not be able to run certain apps at all!

In this section, we'll define those terms and help you check what model and iOS you have. We'll also break down the iPad and explain what each button does.

Which iPad Model do I Have?

The iPad was originally released by Apple in April 2010. Since the release of the original iPad, there have been several releases of updated versions and models of iPads. There is the base iPad model, which is released in "generations". The current release of the base iPad is the iPad 4th generation, released in late 2012.

Apple has also released two other iPad models that differ significantly in size and weight from the general iPad: the iPad Mini, and the iPad Air. The iPad mini, as its name suggests, has a screen that is about 2 inches smaller than the base iPad. The most current version of the iPad Mini was released in late 2013. The other new model is the iPad Air, released in late 2013, which has the same screen size as the base iPad, but is lighter, slightly faster, and has an improved camera.

You can find the model number on the back of your iPad. For a complete list of corresponding iPad models and specifications, please visit <u>Apple's website</u>. It's important to figure out which model you have because many of the **Accessibility Features** we'll mention later can't run on a first generation iPad.

What do All Those Buttons do?

All iPad models come standard with a set of buttons on the outside that you can use to manipulate the screen and iPad settings, and a series of ports to connect things like headphones, computers, and chargers. Check out the diagram on the next page for an overview of the iPad's buttons and ports.

Let's talk about each item individually. We'll go counterclockwise on the device, starting on the bottom.

- **Home Button:** The button that you will use the most, the home button does just what it says: brings you home. Here's a list of its main functions:
 - With an app open, click once on this button to minimize the app you're running.
 - If you've scrolled through pages in the home screen (the screen with all your apps), click once to be brought back to the first page.
 - Hold the button to start Siri. Click once to close Siri.
 - Double click to bring up recently used apps. You can quickly scroll through apps

you've recently had open for multitasking. From here, you can also force apps to quit entirely (instead of being minimized from one home button click) by scrolling until you find the app, and swiping up on the app preview. If an app is unresponsive, forcing it to quit may alleviate the issue. Learn more on how to force quit apps here.

• Triple click to access accessibility shortcuts and other settings "as discussed later".



• Charging/Input Connection: This is where you connect your iPad to power and other sources. Depending on the version of the iPad you have, you either have a 30-pin connection, or the new lightning connection. The 30 pin connection is used by third generation and previous iPads, and the lightning connection is used by 4th generation iPads, the iPad Mini, and the iPad Air. The 30 pin connector has a long, thin input, as seen, while the lightning connector is smaller and more round. There are some minor differences between the two cables, but those are beyond the scope of this book. Just note that all iPad accessories are now being made with the lightning connection, so if you have the older 30 pin style, you may have to purchase an adapter to fit the lightning connection.



30 Pin (L) and Lightning (R) Cables

- **Speakers:** This is where sound will come out of the iPad if you don't have headphones plugged in.
- **Volume Control:** This controls the volume of your device, up and down. Similar to a standard remote control, press on the top of the button to increase volume incrementally, and press on the bottom to decrease volume.
- Silent/Rotation Lock: This The functionality of this button can be changed in settings, which we discuss in the *General Settings* section of "<u>Customizing Your Experience</u>". The two functions are:
 - **Silent:** This mutes all sound coming from your iPad. Note that if you aren't hearing sound and using the *volume control* button doesn't work your device may be set to silent.
 - Rotation Lock: This forces your iPad to stay in whatever orientation it was in when you set the lock. Normally your iPad switches between portrait and landscape mode depending on how you hold it. If this is on, your screen will not change when the device rotates.

- Rear Facing Camera: This camera will capture images and video of what you are facing.
- Power/Sleep: Clicking on this button will cause your iPad to become locked and go to sleep. You should put the iPad to sleep when you are done using it to conserve battery. To get out of sleep mode, you can click the *sleep* or *home* button. To shut your iPad off completely, hold down on this button until you are prompted on screen to swipe to turn the iPad off.
- Microphone: The microphone takes in external sound. If you are using Siri or an app that you can speak to, direct your speech towards the microphone for optimal quality.
- Front Facing Camera: This camera points at you for taking pictures and video. If you're using FaceTime (or taking selfies!), this is how you can look at your screen while capturing pictures and video of yourself.
- **Headphone Jack:** Plug in headphones or external speakers here to have the sound go through those speakers rather than the standard iPad speakers.

What is iOS?

iOS is the operating system used by Apple devices, be it an iPhone, iPod, or iPad (this group is collectively referred to as **iDevices**). You can think of *iOS* as the *iDevice* equivalent of Microsoft Windows. *iOS* comes standard with all *iPads*.

The features that come with each new operating system are built in to the software (and sometimes hardware) of the device. Generally, when you upgrade your iOS, you now have access to new features. One of the more well known examples of a feature that was built into iOS is *Siri*. Siri wasn't available until iOS 5, so if you had a device that was running iOS 4, it wouldn't work with Siri.

The current version of iOS is iOS 7, which was released in September 2013. It runs on iPhones 4 and later and the second generation iPad and later models. Apple often releases small updates to their operating system, which are tracked through new version numbers. Version numbers are tracked by adding dots and a new version number, so a new release could have version number 7.1. Smaller version changes might even come after the original change, so you could be running iOS version 7.1.1 or 7.1.2. If you ever have technical difficulties with an app, the app developer might ask you what iOS you are running.

In June of 2014 Apple announced a new version of iOS, iOS 8, to be released in fall of 2014. To learn more about the new features that will be included in iOS 8, please read "Coming Soon: iOS 8" in Mastering the iPad in Special Ed.

Note: Apps are not always compatible with every version of iOS. If you are running a very old iOS version, you may not be able to download all apps. To learn about minimum iOS requirements, visit "*Viewing and Downloading Apps*".

To check which version of iOS you are running, and upgrade to a newer version if there's one available, head to Settings -> General -> Software Update. You'll see which version of iOS is running, and if necessary, you can upgrade your iOS from here. Apple will often let you know if there is an update available by showing a **badge**, a small red circle with a number in it, in the corner of the Settings icon.

Apple added many accessibility features when they released iOS 6. These were intended to make the iPad more accessible for people with special needs or physical disabilities. We'll be discussing a lot of these features in detail, but just remember that many of these features have both software and hardware requirements, and might not work in every app.

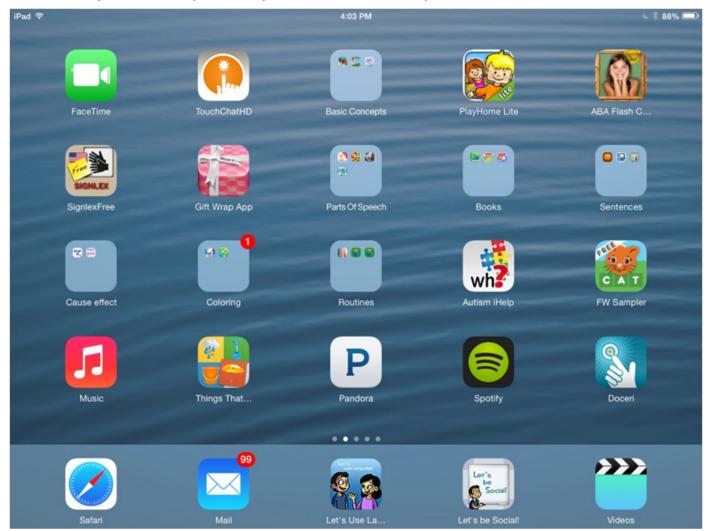


Customizing Your Experience

Now that you've got a good handle on what hardware and software you're using, it's time to dive in and learn how to make your iPad your own. By the end of this section, you'll be navigating the iPad like a pro and be able to set things up just the way you want them.

Setting up Your Home Screen

The Home Screen is just the screen that you see on your iPad when you aren't in an app or settings. The home screen is where all your apps are organized – it's essentially the same as the "Desktop" screen on your computer. Here's an example of a home screen:



The home screen is organized into pages – if you have enough apps, you have the option of putting apps on multiple pages, which you can swipe through. The page control icon at the bottom of the screen with the circles tells you which page you're on. You'll notice there's also a bottom bar that holds apps. This is the place where you want to put the apps that you use most often, because no matter which home screen page you're on, these apps will still appear.

To edit apps, simply press and hold on an app until all your apps start shaking. You'll notice an "X" appears in the upper left hand corner of the app. Clicking on this "X" will delete the app! Don't worry, the iPad always makes sure you want to delete the app, so if you accidentally press the "X" you can cancel after. If you do happen to delete an app and want it back, you won't have to pay for it and can find it in the "purchased" section of the App Store, as discussed in Navigating the App Store.

Once the apps are shaking, you can also move them by pressing and holding on them, and dragging your finger to where you want the app to be located. This is how you add apps to the bottom bar. You'll notice in the screenshot above it looks like there are groups of apps within one space on the screen. If there are apps you want together, and don't want to have to scroll through multiple pages, you can make a group by moving an app on top of another app until a group appears. For example, if you have multiple apps that work on language development, you can create a "Language Development" grouping. Apple comes up with generic names for the groups based on the types of apps you group together, but you can rename groups by clicking on the title when the group is large on the screen.

To stop the apps from shaking, click the *Home Button* once.

Control Center & Notification Center

Two "hidden" sections of the home screen are the *Control Center* and the *Notification Center*. To access the Control Center, swipe up from the bottom of the screen. You'll see a light gray box slide up with several different controls.



The left side allows you to quickly control the music that's playing, including play/pause, track skip, and volume control. The right side allows you to quickly set a timer, open your camera, and adjust the brightness of your iPad.

The middle section (with round icons) allows you to quickly toggle on and off some different settings, including (L to R): <u>Airplane Mode, Wi-Fi, Do Not Disturb</u>, and <u>Rotation Lock</u>. Click on each of those settings to be brought to a full discussion about its functionality.

To access the **Notification Center**, swipe down from the top of the screen. This lists the alerts that you've received from apps, as well as information such as the weather and your calendar for the rest of the day. To manage which alerts appear here, visit the "Control Center & Notification Center" section of the Settings discussion.

General Settings

Settings are where you find all the control features to customize your iPad. This is where you can connect to Wi-Fi or Bluetooth, turn sounds on or off, set privacy limitations, and so much more. In this section, we'll go over some general settings that are useful for day-to-day use of the iPad. For more advanced settings that are useful for people who have disabilities, skip to our *Mastering the iPad in Special Ed* section.

On your home screen you will see the *Settings* Icon. When you click on it, you will see many categories to scroll through on the left hand side. We aren't going to go through every setting here, but we'll discuss some of the most relevant settings for you.

Let's begin in the **General** category. You can find out information about your device, such as which iOS version you have, the serial number, and capacity for memory when you click on **About** (*Settings -> General -> About*). This is also where you can update your software, as previously mentioned.

You can select what you want the function of the side switch (on the side of the iPad on top of the volume control) to be. Under *General* in settings, find **Use Side Switch to** and you can choose either **Lock Rotation** or **Mute** (*Settings -> General -> Use Side Switch To*). **Lock Rotation** stops the screen from switching to portrait or landscape orientations when you move the iPad. **Mute** simply turns the sound off.

Restrictions allow users to restrict certain content on the iPad (*Settings -> General -> Restrictions*). Parents take note - you can limit what your children are able to do on the iPad! You can choose which websites the internet will go to, if kids have the ability to install or delete apps, and purchase apps. By turning the buttons off, you can disable the use of the internet, camera, FaceTime, iTunes store, installing apps, deleting apps, and in-app purchases. You can also control the rating of music, movies, TV, apps, and websites. For example, you could set them all to PG.

Hint - if you click on *Websites* under the heading *Allowed Content* and then click on *Specific Websites Only* a pre-set list of kids websites such as discovery kids, Disney, PBS, and more come up (*Settings -> General -> Restrictions -> Websites -> Specific Websites Only*). This is a quick way to ensure that your children or students only go to educational and kid friendly sites.

Require Password under **Restrictions** sets the time duration that your credit card is unlocked (Settings -> General -> Restrictions -> Require Password). For example, if this is set to 15 minutes the user isn't required to put in a password when buying anything for 15 minutes after the first time. If you are the only user and don't want to put in your password each time you buy something then set it to 15 minutes, but we recommend to keep it at "immediately", which requires the password to be entered every time, just to be secure.

Other Relevant Settings

Airplane Mode turns off all connections to external sources, such as Bluetooth or Wi-Fi. If you're running a therapy session and don't want your students to be able to access the internet, you can quickly turn on Airplane Mode from the *Control Center*, or from *Settings -> Airplane Mode*.

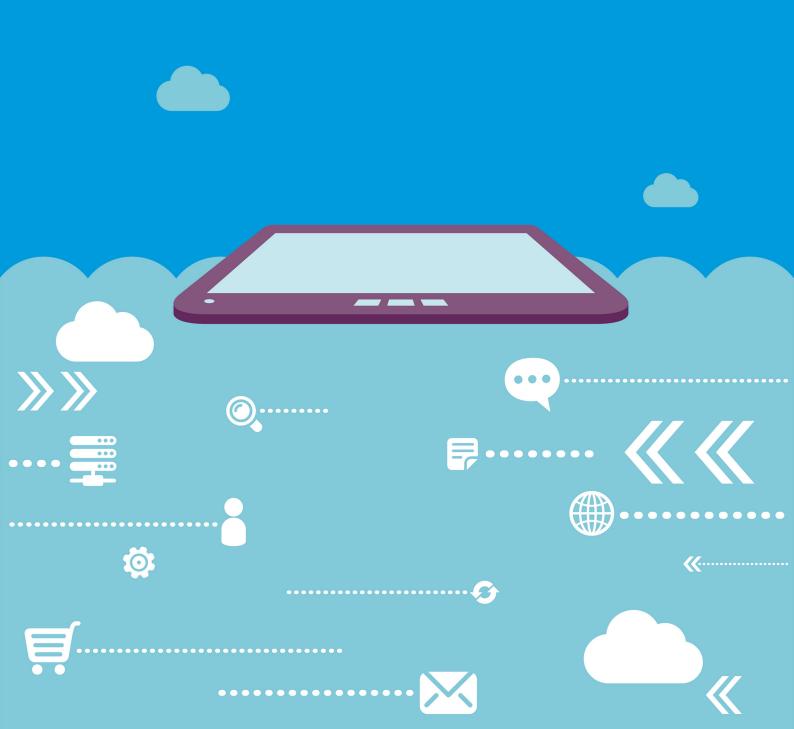
Passcode allows you to set a passcode to access your device. Every time you try to access the iPad, you'll have to enter your code. From *Settings -> Passcode* you can set your passcode, change it, as well as set the time the passcode is valid for in *Require Passcode*. This is similar to the *Require Password* setting in *Restrictions*.

Have annoying pop ups and sounds from apps that you'd like to turn off? Check out the **Notification Center** (*Settings -> Notification Center*). From here, you can click on individual apps and adjust their *Alert Style*, whether or not their alerts make a sound, and if they appear in the *Notification Center*, discussed in *Control Center & Notification Center*.

Do Not Disturb is a great setting if there are certain times you don't want your iPad to vibrate or make any sounds – like when you're sleeping or in the middle of a session. From *Settings -> Do Not Disturb*, you can schedule do not disturb for a certain time of day, every day, and also set exceptions for receiving FaceTime calls from contacts and others. *Do Not Disturb* essentially mutes all alerts, even if the sound is turned on. For security, *Do Not Disturb* also has a *Repeated Calls* feature, which won't silence a call if you receive multiple calls from the same person within three minutes. This feature is probably more relevant for iPhone than iPad. *Do Not Disturb* can quickly be accessed from the *Control Center*.

That's it for now on settings. For more advanced settings relevant to Special Education, jump to our Mastering the iPad in Special Ed section.

APPS 101





APPS 101

So you've got your iPad all set up, you know what all the buttons do, and you know how to organize your home screen. You're well on your way to becoming an iPad master. There is one important and powerful part of the iPad we haven't covered yet – buying and using apps! You've probably heard that term before, but you may not know exactly what an app is, does, or how you get them. Don't worry – we've got you covered!

In this section, we'll define an app, fill you in on the process of downloading, updating, and troubleshooting apps, as well as give you some great resources for app discovery. Apple has made a huge effort to support the Special Needs community and consequently, developers have made some great apps for our industry! By understanding and leveraging the power of apps, you'll ensure that you're making the most of your iPad and providing the best therapy experience possible.



What is an App?

As an app developer, we've run across a lot of misconceptions people have about apps and how the process works. Let's define some key app-related terms and clear up some of the confusion.

The word "app" is short for application. An application is just a software program that allows you to do a task. You've been using apps for a long time! Programs like Google Maps or your email are "web apps", and Microsoft Word is a "desktop app".

When you run apps on your iPad, you're using a "mobile app". It's just a piece of software that happens to run on a mobile device instead of in a web browser or on your computer. The term didn't become popular until the rise of mobile devices like the iPhone and iPad, so when people use the term "app", you can assume that they are referring to a mobile app.

How are Apps Priced?

Apps range widely in price, from free to upwards of \$200. The average price varies significantly by app category. Many "consumer" apps like games are free and extremely high quality. The category we're going to be focusing on, Education, specifically Special Education, has apps that are aimed at professionals and are generally higher priced.

Apps make money in 3 ways: advertising within the app, the initial **download price**, and **In-App Purchases**. Because Special Education apps are used by professionals and parents with children, advertising is frowned upon, which is one reason why many special education apps have a higher price.

The *initial download price* is a one-time fee that you pay to get the app *for life*, regardless of future price increases. So if you pay for an app that costs \$4.99 today, and the developer makes many improvements and ups the price to \$19.99, you don't have to pay a thing, because you already own the app!

That said, you might not get all of the content and features that the developer adds to the app, because of the third way apps make money, **In-App Purchases (IAP)**. *IAP*'s consist of extra content or functionality that the developer has decided should be paid for on top of the existing download price. For example, let's imagine you downloaded an app of different crossword puzzles that cost \$9.99 and came with 50 puzzles. After a few months, you've done all the games, know all the answers, and want more puzzles. Well, the developer could offer more games for sale within the app. Rather than downloading a whole new app, you could pay a fee (ex: \$0.99 for five more crosswords) for more content.

Many free and paid apps rely on In-App Purchases as revenue sources. It's a good way for developers to keep the base price lower for the majority of users while allowing very active users to expand the app to meet their needs.

What are App Updates?

App developers are constantly updating their apps to fix bugs and add features. To take advantage of the changes, you have to update (download the latest version) of the app. As we said before, once you purchase an app, it's yours for life, so you will never have to pay to update an app. App versions are numbered just like iOS versions, so you could be running *Yelp* version 7.7 or *Twitter* version 6.4.1.

To see if you have app updates, go to the App Store Icon on your home screen, and click "Updates" on the far right of the bottom tabs. From here you can see if there are apps that need to be updated, and either update all of them or select individual apps. If you forget to check for updates, the App Store icon will have a **badge** with a red number indicating how many apps need to be updated.

New in iOS 7, Apple now provides automatic app updating. With this feature turned on, you'll never have to worry about manually updating apps. Your iPad will check regularly for updates and automatically download new app versions for you. To set automatic updates, go to Settings -> iTunes & App Store -> Automatic Downloads -> Updates.

What do I do if an App isn't Working?

Unfortunately, "bugs", or errors within an app that cause it to stop working correctly, are a fact of life. There are so many variables that go into how an app works – including what iPad model you have, what iOS you're running, even how you're holding the iPad (portrait or land-scape), that it's extremely difficult to create a program that works 100% of the time for 100% of your users. Even the standard Apple apps like *Mail*, *Maps*, and *Safari* can have bugs in them!

Sometimes, bugs result in "crashes", meaning the app closed unexpectedly. Oftentimes, if you experience a crash, you can restart the app and use it as normal with no further issues. Other times, you might repeatedly try to perform a function within an app and it won't work, or the app crashes every time. In this case, you might have to talk to the developer. Frequently developers have links to their website or support emails somewhere in their app, often in settings (settings inside the app, not your iPad settings). If there is no link there, you can go to the app page on the App Store, discussed in the next section, *Navigating the App Store*, and find the support link there.

When talking to a developer about a bug, supplying them with a little information will make the process a whole lot easier. If possible, include the type of iPad you are using, the iOS you are running, and what app version of theirs you are using. If you haven't updated the app in awhile, they may have already fixed the problem! In addition, try to explain the circumstances that led to the app crashing. Knowing what actions you took inside the app will help the developer figure out where in the program the app is crashing.

If you can't get in touch with anyone, another option is to delete the app entirely from your iPad and reinstall it. Again, you own the app for life, so you won't have to pay a thing. In certain apps, deleting the app might cause you to lose custom content or settings that you've set up in the app. Because of this, we suggest that deleting the app be a last resort after you've exhausted all other options.

What If I Want to Return an App I've Purchased?

According to the <u>App Store Terms of Service</u>, all sales are final. That means that to return something you've purchased, you'll have to get special approval from Apple. If there is a legitimate problem with the app, such as crashing, you should be able to get a refund with an issue. However, if you just want to return an app because you decide you don't want it, you might run into trouble. Because all sales are final, Apple doesn't have to honor your refund request. If you get into the habit of returning a lot of apps, they may start declining your requests. To ensure you are getting quality apps, you should research beforehand, as discussed in our <u>Where can I Research Apps to Buy?</u> section.

If you are sure you want to return an app, visit this link for detailed instructions.

Volume Purchasing & Deployment for Education

Apple provides educational institutions with the ability to participate in a **Volume Purchasing Program**. If a developer makes their app available for volume purchasing, a school district can buy 20+ copies at a 50% discount. Using the volume purchase program, you can submit Purchase Orders to Apple rather than having to buy apps individually, and you can manage the distributions of apps through codes or through **Mobile Device Management (MDM)**.

MDM allows your IT department or an administrator to remotely manage the deployment of apps. You can even install apps on devices without any user interaction! So, if you wanted your entire department to use a certain app, you could install it on their devices for them! MDM is also useful because if there is a user that no longer needs a certain app, you can easily transfer the app to another iPad. To learn more about Apple's solutions for education, visit their website.

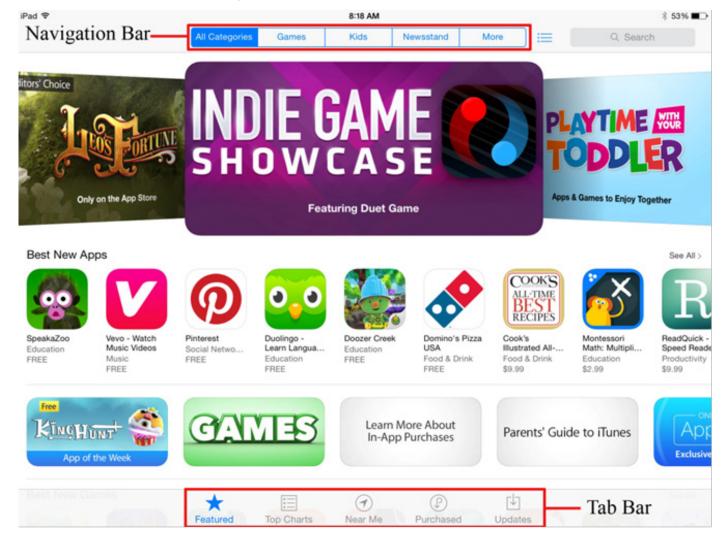
Navigating the App Store

Now that we know what apps are, time to download some! In this section, we'll learn about Apple's *App Store*, the online marketplace to purchase and download apps. It might seem a little daunting at first, but once you get the hang of it, it's really easy to navigate. We'll also learn about the App Store's *Special Education* section, and we'll dissect individual app pages to make sure that you're getting exactly what you need to support your lessons and activities.



How do I download apps?

Apps can be found in the Apple **App Store**, which comes standard on your iPad. To get into the app store, click on the blue *App Store* app that appears standard on your home screen. Now you're in business! Let's go over some key terms.



We're going to refer to the bar at the top of the screen as the **Navigation Bar**. Here's where you can easily flip through the different app categories. Apple organizes apps in categories to make it easier to browse through apps you might like. Some of the more popular categories are *Games*, *Productivity*, and *Social Networking*. The category we want to focus on is *Education*. The *Kids* category may also have some good apps, but the vast majority will be in *Education*. To get to the *Education category*, tap on the "more" button on the far right side of the *Navigation Bar*. A dropdown will list all the categories, including *Education*.

Once you've selected *Education*, you'll notice that the page you're on looks very similar to the home page of the App Store. Apple sets up all of their category pages in a similar way so you can easily navigate through each one. Here's what the *Education* home page looks like:



If you look at the **Tab Bar** at the bottom of the screen, you'll notice that the *Featured* icon is highlighted. This is the default home page of each category. Every Thursday, Apple resets the featured category to help you browse through new and noteworthy apps. The top two sections highlight great apps that Apple wants you to know about, and the section titled *Education Collections* has groups of apps that go together. It might be worthwhile to browse through these collections every once in a while to see what's out there.

Before we get to the Special Education section, let's go over the rest of the buttons on the **Tab Bar**. The *Top Charts* tab lists apps in order of performance in three divisions: *Paid* (most downloaded paid apps), *Free* (most downloaded free apps), and *Grossing* (apps that make the most money, including downloads and In-App Purchases). You can view this by category, so checking what Education apps are popular every once in a while may be beneficial.

The *Near Me* tab uses location services to determine what apps are popular in your local area. It can't be filtered by category, so the apps here might not be relevant. However, if you open this tab while in school, you may be able to find popular apps that other teachers are using. You also may be able to find beneficial non-education apps for the area you live in, such as public transit schedule apps.

The *Purchased* tab holds all of the apps you've ever purchased, regardless of whether they are still on your device. It's a quick way to find apps you've previously deleted, or to find app pages in order to leave reviews or find developer contact information. We'll cover leaving reviews later in this section.

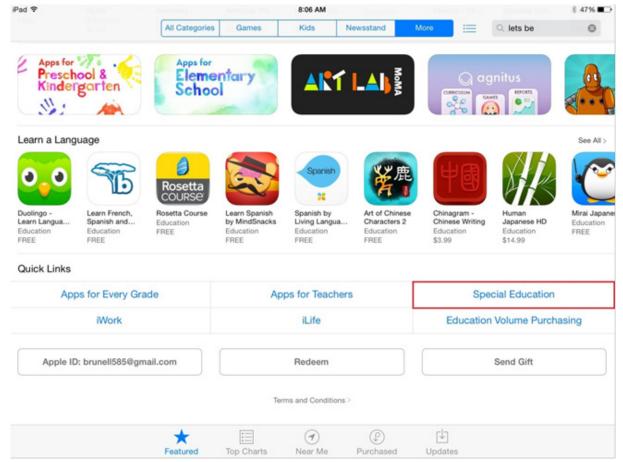
Lastly, the *Updates* tab is where you go to see which apps of yours need to be updated or have been updated recently. Developers will leave notes about changes in new versions, which you can read here. If you turn on **Automatic Updates**, as previously discussed, you'll rarely need to use this section. Flip back to *What are App Updates?* for a more detailed discussion.

Searching for Apps

You'll notice that in the upper right hand corner of the App Store there's a search box. If you know the name of an app you want to investigate, you can enter it here to search for it. You can also search by keyword, like "articulation", "spelling", or any other keyword you can think of. Unfortunately, the keyword search in the App Store is notoriously poor. Apple sorts search results by "Relevance", which doesn't necessarily mean "Best". The results you get back will most likely be apps with the keyword in its name.

The App Store Special Education Section

Apple's dedication to Special Education is unmatched in the market. From the way they build their tablets, to the accessibility features we'll discuss later, Apple makes sure their devices can be used by as many people as possible. Continuing that theme, the Education category in the app store has a *Special Education* section. To find it, scroll to the bottom of the Education home page and click on the button that says *Special Education*.



Once you get inside the *Special Education* section, you'll see that apps are organized into different skills. These are apps that Apple has hand selected to appear in this section. Let's go through each category.



Communication

• Communication apps can range from materials for Speech Pathologists to Augmentative and Alternative Communication (AAC) apps which help users communicate their wants, needs, and feelings. These apps are generally higher priced, with many priced at over \$50 and a handful in the \$100-\$200 range. It's unlikely as an SLP or Special Ed teacher that you would use these for your entire class, but if your students/children have their own personal tablets, these apps may be beneficial to enhance their communication. Before purchasing these apps, it's best to do research (discussed in Where can I Research Apps to Buy?) to make sure the fit is correct. It is wise to have an AAC/ Assistive Technology evaluation done by a team of professionals including the child's teacher, Speech-Language Pathologist, Occupational and Physical Therapists, and Vision Specialist or Assistive Technology specialist if needed and to determine what the child's needs are and how they can best be met. Because these apps are expensive, many have Resource Centers located across the country that will allow you to come in and try the app before purchasing. Those services aren't provided by every developer, so check the developer's website for more info.

• Emotional Development

• Emotional Development apps focus on recognizing and understanding emotions as well as reacting appropriately to different social situations. Our first app, *Let's be Social*, which focuses on social skills, is located in this section.

Sensory & Visual Perception

 These apps help those with motoric impairments, dyslexia, and visual perceptual issues learn visually. Examples include moving shapes into the correct cutout and dragging your finger to trace along an outline. These apps are great for OT's and really take advantage of the interactivity of the iPad.

Seeing & Hearing

Have a student that needs help with ASL? This is the section for you. There are several
apps focused on teaching sign language in the Seeing & Hearing section.

• Language Development

• The name says it all. From learning parts of speech, to forming sentences, vocabulary and wh- questions, these apps cover language development from A to Z. There are also apps for articulation and stuttering in this section. Most of these apps are in the \$10-\$20 range. For SLP's this is a great section to start building up your toolbox of apps.

• Life Skills

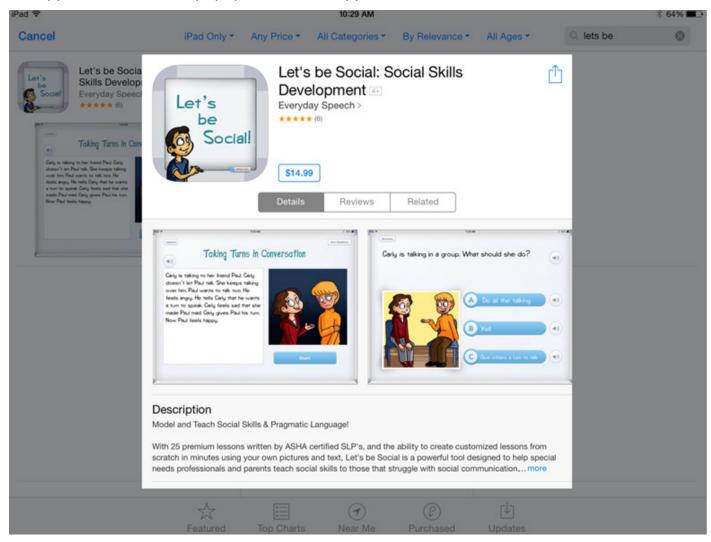
 Life skills apps are all about setting schedules, getting into routines, learning daily living skills and preparing for interactions with others. These apps are generally inexpensive and feature some well-known brands including PBS Kids and Sesame Street.

• Trackers & Reference

• Finally, Trackers & Reference apps allow you to track data over time, or set timers for activities like studying and chores. If you need to set activity plans for your students to keep them on track, you might find an app in here that you can use to get the job done.

Viewing and Downloading Apps

Once you find an app you want to learn more about, clicking on the **App Icon** (the image that accompanies the app name) will bring up a popup with all the pertinent information about and app. Here's what the popup for our first app, Let's be Social, looks like:

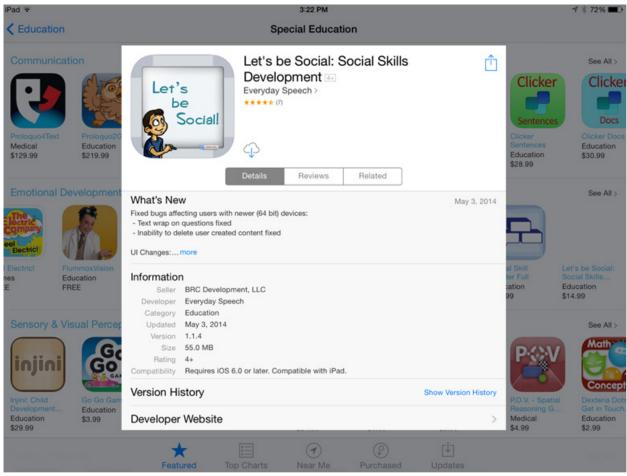


This is where you download the app! You'll notice the price, highlighted in blue. To download the app, you click on the price (or "FREE") button. You then tap again to confirm. Typically you'll then type in your Apple ID password and then the app will download.

This page also has screenshots, so you can see what the app actually looks like, as well as a description of the app, written by the developer. If you click that blue button that says "more" at the end of the description, you'll be able to read the full description of the app. The description lists the features of the app, who it's for, and other pertinent information.

You'll also notice there are two other tabs titled "**Reviews**" and "**Related**". Reviews contain all *Ratings and Reviews*, discussed in the next section. For now, just know these are ratings given by actual users of the app. The "Related" tab has other apps that were purchased along with this app, so you can take a look there to see if there are any other apps that might be helpful.

As you scroll down in the "Details" tab, you'll notice a few things: What's New and Information. What's New contains notes on what the latest version of the app contains, and Information contains notes on who the seller of the app is, and what version of the app you're looking at.



Notice the *Compatibility line*? This will tell you if the app will work with the version of iOS you are running. If you are running an old version of iOS, it's important you check this section out. To figure out what version of iOS you are running, go to *Settings -> General -> About*.

The very bottom section has some additional information to check out:

- Version History Here you can see a list of all the updates made to the app, with dates they were updated. This is a good place to figure out whether a developer is listening to their customers and paying attention to the product by continually updating it. If an app hasn't been updated in a year, you might be weary that the developer is never going to improve the app.
- **Developer Website** A link to the developer's website, if they have one. This is a good place to go to find contact information if you need support for an app.
- Privacy Policy If you're concerned about your personal data, you can read an app's privacy policy (if they have one) here, which states what the app does with your data.
- **Developer Apps** If you like the app you're looking at, or just want to see how experienced a developer is, this link will take you to the developer's iTunes page so you can see what other apps they've created.

Note that if a developer doesn't have a website or privacy policy, there will be no links to those items.

Where can I Research Apps to Buy?

Deciding whether an app is right for you can sometimes be a tricky process. Luckily, the Special Ed community is extremely tight knit and loves to share information on apps that have worked for them. Let's go over some of the best places to find more information on apps.

App Ratings and Reviews

This is the easiest and probably most common place people find out about the quality of apps. When you search for an app in the app store, you can see ratings and reviews left by that app's users. *Ratings* are made on the standard 5-star scale, where 5 is best and 1 is worst. *Reviews* are comments left by the raters that add context to their reviews. Once an app has 5 ratings, Apple will show the average score underneath the app name.

It's important to note that Apple resets ratings and reviews with every new app version that is released. When clicking on reviews for an app, the default setting is "*This Version*". Apple gives you the option to switch to "All Versions" so you can read reviews of previous app versions if there isn't enough information on the newest version.

There are a few issues with relying solely on app ratings and reviews to determine the quality of an app. Some of the major ones are:

- An average score lacks context. Taking the time to read why people rated an app what they did can sometimes make a world of difference. There may be negative reviews that don't apply to you people trying to use the app in a way that you won't be using it. The same goes for positive reviews the app might work well for most people, but for people with your specific needs, it doesn't work well. Take some time to read through the reviews before dismissing or accepting an app just on the score.
- Extreme experiences generate reviews. If it seems like every single rating you see is either 5 stars or 1 star, it's probably because people generally only rate apps when they are very happy or really upset with an app. If they don't leave a detailed review, it's hard to tell what 1 star reviews mean. Is there a legitimate problem with the app, or did the user have misguided expectations?
- A very small percentage of users leave reviews. When speaking with other mobile app developers, we've heard estimates of anywhere from 1 in 100 to 1 in 1000 users leave a review. For free apps like games that potentially have millions of users, it isn't as much of a problem. For Education apps, which are higher priced and have significantly less download volume, that means you might only have a couple of reviews to go on for each version of an app.

Bottom line, you can glean some great information from app ratings and reviews, but just be sure to put some time into actually reading the reviews and understanding the context in which they were left.

App Review Sites

Because of the explosion of apps for the Special Needs Community, there are many websites out there that post reviews, giveaways, and news about special needs & educational apps. These sites generally have unbiased reviewers that post long-form reviews about what they like and don't like about certain apps. Some even post screenshots and videos of their experiences. Some of our favorite app review sites are:

- Smart Apps for Kids
- Smart Apps for Special Needs
- The Appy Ladies
- The iMums
- Technology in Special Education
- Appy Mall
- Friendship Circle of Michigan

Note: We were not compensated in any way to list these sites. They are just sites we have had good experiences with! If you have a site you like to use, let us know <u>here!</u>

All of these sites have tons of app reviews and descriptions, often organized by focus area, such as Language Development, Articulation, Social Skills, etc. Some of these sites also allow users to rate apps, so it's another place to find user input. One great thing about these sites is that they all have active bloggers, so if you have a question about an app, you can email them to get an unbiased opinion.

App Developer Websites

App Developer websites are often a great way to find out more about a company and what their overall vision and goals are. Often on developer websites you can find *Frequently Asked Questions (FAQ)* about their apps, links to their social media sites so you can interact with them, and often you'll find video tutorials about different features of their apps.

Many times websites also have "Contact" pages, with email addresses or built in forms that you can use to get in touch with them. If you have questions about what population an app is targeted at, how different features work, or if you need support, this is the best place to find answers.

Websites may also have testimonials and links to outside reviews of apps, but just know these are most likely only positive reviews and experiences with an app.

MASTERING THE IPAD IN SPECIAL ED







MASTERING THE IPAD IN SPECIAL ED

Now that we've mastered setting up our iPad, learned to use it and customize its features, and how to find apps, we're going to focus on the primary features available for Special Education and people who have disabilities, called *Accessibility Features*.

Accessibility Features will turn your iPad from just a cool device into a powerful, flexible, and interactive tool that can be used to change the life of someone with special needs. Apple has made a point to support nearly everyone that wants to use one of their iPads. Whether the user needs support with Vision, Hearing, Motor, or Cognitive skills, the iPad has settings to support them. We'll walk through each setting individually, paying special attention to the different use cases and populations that each can support.

You'll also learn about *Guided Access*, a setting that will take your sessions to the next level. You'll see you can really tailor your experience to accomplish your goals, while still allowing your students or children to learn, communicate, and interact like never before.



General Settings for Special Education

The first settings we are going to talk about are back in a familiar spot, *General Settings (Settings -> General)*. **Text Size** (Settings -> General -> Text Size) is a way to increase the text size for anyone that needs larger print. Once you click on **Text Size**, you'll see a message telling you it will work in apps that support Dynamic Type. This means it won't work in every app, only if the Dynamic Type feature was built into that app. The apps that come with the iPad such as *Mail, Contacts, Calendar, Phone*, and *Notes* let users change text size. If you need even larger text, jump to <u>Larger Text</u> in Vision Accessibility Features.

Multitasking Gestures is another helpful tool under *General Settings (Settings -> General -> Multitasking Gestures)*. This allows people to use 4 or 5 fingers to navigate the iPad. This feature is useful for people who are physically limited. Quick tip for Speech Therapists or Teachers - keep this toggle turned off so kids aren't able to swipe sideways to get into new apps. When this feature is turned on, users are able to swipe to the side to open a new app, even if you are already in an app. This can hinder a speech session because kids can easily close the app you are working in and disrupt the lesson.

Underneath **Text Size**, you'll see **Accessibility** (Settings -> General -> Accessibility). Let's dive in to each of the different sections to see how you can adapt your device to meet the needs of almost anyone.

Vision Accessibility Features

VoiceOver is a screen reader that will read text out loud (*Settings -> General -> Accessibility-> VoiceOver*). This feature was built to use with individuals who are visually impaired. *VoiceOver* reads the entire screen and can give information such as how much battery is left, if the webpage has finished loading, and will what items are on a page. Users tap once to hear what they are clicking on and tap twice to select it. Users must use three fingers to scroll so this isn't a great tool for people who have motor limitations and cannot point or use three fingers.

For a list of VoiceOver commands, visit this <u>link</u>. Note that VoiceOver has a practice area (Settings -> General -> Accessibility-> VoiceOver -> VoiceOver On -> VoiceOver Practice) where you can perform different gestures and the iPad will tell you what action that gesture performs.

The **Zoom** feature will enlarge the screen (*Settings -> General -> Accessibility-> Zoom*). To move around the screen once it is zoomed in, you use three fingers instead of a single point. This requires specific motor skills that may be challenging for some.

Invert Colors is another feature for the visually impaired (*Settings -> General -> Accessibility-> Invert Colors*). It makes the colors on the screen highly contrasted so people with low vision can see them better. Again, this doesn't work in all apps.





Speak Selection makes a speak button appear when users select text (*Settings -> General -> Accessibility-> Speak Selection*). This gives an option to read a highlighted selection out loud. Unlike VoiceOver, it will not read the entire screen all at once, only the selected areas. To use, tap and hold a word or phrase. The option to copy, define, or speak will pop up above the highlighted phrase. You can also expand the selection by dragging the ends of the selection left and right. Tap on "Speak" to listen. This is helpful for anyone having a hard time reading the words on their screen.

Speak Auto-text will automatically read auto-corrections and auto-capitalizations out loud when a user is typing (*Settings -> General -> Accessibility-> Speak Auto-text*). You might notice that when you are typing, Apple devices correct your mistakes. Sometimes they fix your mistake with another mistake or turn what you were typing into another word. To avoid that, turn on Speak Auto-text which reads any suggested corrections before changing them. This is a helpful editing tool, especially for people who have difficulty paying attention.

Larger Text will increase the size of the text when turned on. This option is for text sizes that are much larger than allowed in *General Settings*. Again, it will work in all of the Apple apps like *Mail, Contacts, Calendar*, etc. and in apps that support Dynamic Type. Users can scroll to select how big they want the size to be.

Bold Text will make the text appear thicker. To turn on, toggle it to the on position. It will alert you with a message to restart your iPad if you turn this feature on.

Button Shapes will make finding buttons a little easier. Button Shapes provides a gray outline around buttons. It isn't a huge change but provides more definition to buttons.

Increase Contrast will increase the contrast of the colors on the screen to make it easier to see. When you click on Increase Contrast, you get three options to choose. You can Reduce Transparency, Darken Colors, and Reduce White Point. (Settings -> General -> Accessibility -> Increase Contrast -> Reduce Transparency) These are all ways to increase legibility of the screen. With Reduce Transparency turned on, overlays that are usually gray turn to black.

Reduce Motion limits the animation during transitions. New changes in iOS have added new visual features that cause apps to float above the background or open on the screen. While these may look interesting, they cause some people to have motion sickness symptoms. To turn off, simply tap *Reduce Motion* to the on setting. (*Settings -> General -> Accessibility->Reduce Motion*).

On/Off Labels turns on more labels (a 1 for on and a 0 for off) for the on/off toggles. It is meant to make them easier to see. (Settings -> General -> Accessibility -> On/Off Labels)

Hearing Accessibility Features

Hearing accessibility features include *Subtitles and Captioning*, *Mono Audio*, and the ability to adjust the volume balance between left and right channels (which is useful for people who have a "better" ear).

Subtitles and Captioning can be toggled on or off (Settings -> General -> Accessibility-> Subtitles & Captioning). Users can select what the subtitles will look like by changing the font style (Settings -> General -> Accessibility-> Subtitles & Captioning -> Style). This is helpful if there for those with both Hearing and Visual impairments, as you can make the captions highly contrasted.

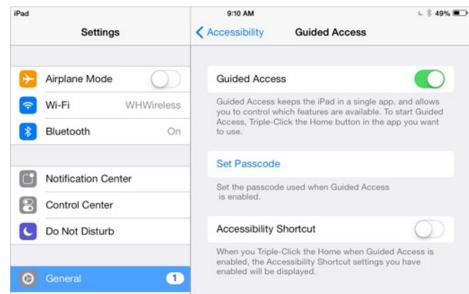
Mono Audio adjusts sound when using headphones. When turned on, the iPad plays all of the sounds in both ears (Settings -> General -> Accessibility -> Mono Audio). When it is turned off it is in "stereo" mode and will break up sounds so that they play different portions in each ear, similar to the way we hear in life. But people who are hearing impaired may be missing portions of sounds if stereo is turned on. If you're using headphones with someone that has limited hearing, turn Mono Audio on.

Below *Mono Audio* there is a bar labeled "L" and "R" for left and right so users can favor their "good" ear or set more volume towards one side.

The Holy Grail: Guided Access

Learning features has one of the most useful features for anyone using an iPad with children. This feature is called *Guided Access* (*Settings -> General -> Accessibility -> Guided Access*). It locks the user into an app so they can't easily swipe out or close the app. Children are very smart and can figure out how to close out of apps to get out of doing their work. This is no longer a problem when using Guided Access! You can even disable individual buttons! To set it up:

- **1.** Toggle the switch on in Settings (Settings -> General -> Accessibility -> Guided Access).
- **2.** Set your passcode to unlock accessibility mode. I like to use the same password I use to lock my device.
- 3. You can set the Accessibility Shortcut on or off if you want. This will allow you to quickly turn guided access on and off by triple-clicking the Home button.







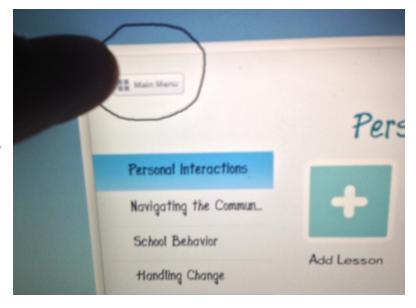
To use Guided Access within an app:

- 1. Open up the app of your choice.
- 2. Press the *Home* button three times. The home button is the round button at the bottom of your iPad.
- 3. Enter your passcode.
- 4. Now you're brought to the Guided Access settings. Along the bottom, you'll see you can shut off the different buttons on the actual iPad. If you disabled everything, the user would be restricted to just one screen and wouldn't be able to leave. You can also disable touching and motion events. If the switch is green, that means that the action is turned on and can be used. Touch means tapping the screen.



Turning *Touch off* will gray out the entire screen, meaning tapping the screen will do nothing. This would be helpful if you are watching a video with students and you don't want them to turn it off. Turning *Motion off* will make it so students can't rotate the screen from portrait to landscape position. *Hardware Buttons* gives the option to disable the sleep/wake button and volume buttons. When off, they will not respond when pressed.

5. Additionally, users can select any buttons on the screen they would like to disable. This means that even when clicked on, they will do nothing. To "select" a button, you just circle it with your finger! In the picture below, you'll notice the buttons in the upper left hand and right hand corners have gray boxes over them. This is useful when working with children who will tap on the "settings" or "next page" buttons and disrupt the lesson.

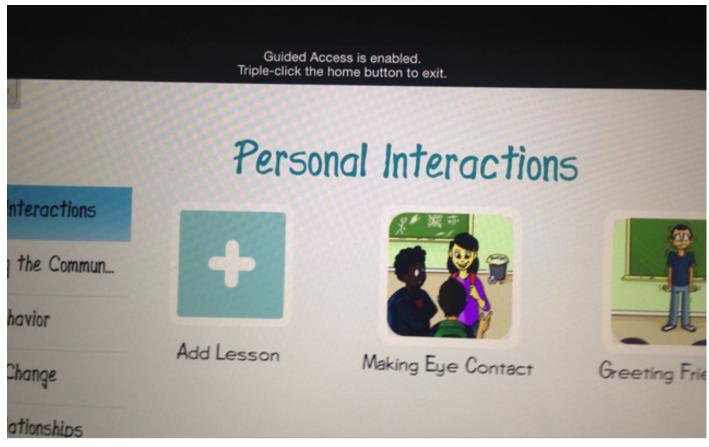


6. Click "begin" in the upper right hand corner and you're now in guided access!



"Main Menu" and "Edit" buttons are disabled

If you try to press the home button to get out of the app, this pop up error will occur:



To stop *Guided Access*, hit the home button 3 times, enter your code, and press "end" in the upper left hand corner.

If your students are like mine don't let them see you hitting home 3 times because you don't want them to learn the secret! Once you use this function you will see how fantastic and helpful it truly is.

Physical & Motor Accessibility Features

The Physical & Motor features are intended for people with physical limitations. Features include *Switch Control*, *Assistive Touch*, and *Home-click Speed*.

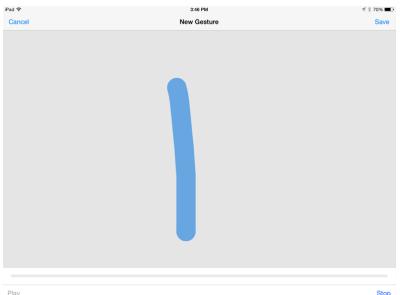
Switch Control will scan and read the screen for people using a switch (*Settings -> General -> Accessibility -> Switch Control*). Switches allow people to access the iPad or computers by clicking on the switch instead of the iPad screen. There are additional settings that let users select how many switches are being used, how fast the scanner goes, grouping items so they will be read together which makes navigating a little faster, and visual effects such as cursor color.

Assistive Touch was created for people who have physical limitations. Once turned on, a pop up appears to make standard controls like the home button easier to press (Settings -> General -> Accessibility-> Assistive Touch). Once you are in the pop up menu, the options of Gestures, Device, Home, and Favorites appear. Gestures will let you select how many fingers, two to five, you want to control the screen. Device lets you perform actions such as rotate screen, turn volume up or down, triple click, or screenshot with a single tap to the screen. Favorites are where users store custom gestures they've made to navigate the iPad. If you have trouble pressing the home button, the pop up menu has a home button, which you can tap on the screen instead.

Custom Gestures will create a custom gesture that will control the iPad (Settings -> General -> Accessibility->Assistive Touch -> Custom Gesture). If multi-touch gestures are difficult, you can choose to do them with one finger tap. For example, if someone has trouble scrolling on their iPad, you can record a "scroll" gesture by scrolling with your finger in the Create New Gesture area (Settings -> General -> Accessibility->Assistive Touch -> Custom Gesture).

You can name your gestures, in this example we'll name the gesture "Scroll". These gestures can be accessed from the Favorites in the pop up Assistive Touch menu. To perform your Scroll gesture, click on the Assistive touch pop up, and click Favorites, then Scroll (Assistive Touch menu -> Favorites-> Scroll). Now a circle will appear on the screen, and wherever the user taps, a scroll gesture will be performed.

Home-click Speed changes the speed required to double or triple click the home button (Settings -> General -> Accessibility -> Home-click Speed).



Our recording of a "scroll" gesture

Users have "slow" and "slowest" settings to choose from. You can actually see what the clicks look like when you click on them in the settings menu. This feature benefits people who have motor limitations by slowing the speed needed to hit the home button.

Voice Dictation & Siri

While not located in *Accessibility* Features, **Voice Dictation** and **Siri** provide great assistance to those with physical or visual impairments. *Voice Dictation* allows lets you use your voice to type or navigate the iPad. It's similar to using Siri (see below) in that you can use it whenever you would type on the keyboard. This can be useful for writing notes, emails, searching the web, and even writing longer documents. For anyone with physical limitations who can use their voice this is a powerful tool. This isn't something you turn on or off in settings.

To use, tap on the microphone button on the onscreen keyboard and start talking. Tap the *Done* button when finished. Both *Siri* and *Voice Dictation* come with iPad 3 or later generations. Useful tip - the iPad 2, which doesn't have the ability to use dictation in most apps, can use voice dictation with the *Google Chrome* browser app.



Using Siri

Siri is another great tool for people who have difficulty typing and can use their voice (or for anyone who wants to save time typing). Say "check email" to listen to your mail or "Send email to (person's name)" to compose one. Once you've read an email you can reply by saying "Reply to (name)". Siri will also type text messages for you. Say "Send text to (person's name) saying..." to quickly write a text. Siri will set alarms after being told "Set an alarm for (the time)" or even "Wake me up in 2 hours" for a nap. Quickly make phone calls by saying "Call (name)". Other useful tips are to check the weather, scores of sports games, or even movie times. Ask in question form and be specific. For example, "What is the weather in Boston today?" or "When are show times for (movie name)?"

For a long list of Siri commands, visit this <u>link</u>.



Coming Soon: iOS 8

Apple recently announced the newest version of iOS, iOS 8, will be released in the fall of 2014. As with every new release, there will be significant upgrades and changes to the standard *Accessibility Features*. In this section, we'll quickly run down what features will be added, and what features will be modified.

What's new?

For people with vision impairments, **Grayscale** will replace the colors on your screen with gray shades that range from white to black. This will make the entire screen gray for messages, apps, videos, and other iPad functions.

Third-party *Alternative Keyboards* such as Braille Keyboards will be allowed in IOS 8. An Apple 6-key Braille keyboard will be available, as well as commercial keyboards made by outside developers. Users can buy keyboards that fit their needs.

Quick Type is a totally new feature to improve the efficiency of typing. It uses word prediction to reduce the number of keyboard strokes needed when typing. Anyone who is familiar with Co:Writer will see a familiar setup. A suggestion bar appears with word options that users can tap on to select. Quick Type will also use context to help finish the words you type.

Touch ID was introduced with iOS7 to unlock your phone or make purchases in the App Store using your fingerprint rather than a passcode. Now it will be used in apps as well. This feature already is great for blind users because it offers secure authentication without having to type, which can be a slow process with *VoiceOver*. Note that Touch ID only works with the newest devices. The iPhone 5s has Touch ID built in, but no current iPad model has Touch ID capability. However, it's expected that the next iPad released will have this functionality.

The *In Case of Emergency Card* feature stores contact information such as family members' names, addresses, phone numbers, and medical information that can be used in emergency situations. While useful for anyone, this could be especially useful for people with disabilities who are nonverbal or cannot relay their information to others. The card can include a photo, medical conditions, allergies, and current medications.

Hey Siri is a new feature that lets users activate Siri without pressing any buttons. This could be helpful for people with physical limitations who can better control devices through their voice. To use, simply say "Hey Siri" followed by your question.

The "Alex Voice" is the current voice used by the Mac computers. It is known for its high quality and natural sound. The Alex Voice will now be available on iPads with iOS 8. This natural sound will improve the current VoiceOver screen reader dramatically because it will be easier to listen to and understand.. Right now, the voice is very robotic and choppy, sometimes making listening difficult.

What's Changed?

Spotlight is already available in IOS 7 but is improving in IOS 8. Spotlight search will be similar to Siri but it won't require users to speak. Instead, they can type to search both their device and the internet without having to pull up a web browser. This will benefit people with speech impairments who can't use their voice by reducing the number of clicks needed to search the web.

The **Zoom** feature has improved in iOS 8. You have the option to zoom in on the entire screen without zooming in on the keyboard. This helps people still read the screen and enter information in to small text boxes without hiding the keyboard. Under the Zoom settings there will be a toggle switch to "leave the keyboard unzoomed".

Guided Access will be improved with more features such as setting time limits, a countdown timer and Touch ID support. These will be useful features for working with children who have Autism.

Apple has made some changes to the **organization** of the Accessibility Features. The features useful for people with physical limitations that used to be grouped under the "*Physical & Motor*" section are now found under a new name, "Interaction". Also, *Subtitles & Captioning* which used to be found in the "Hearing" section are now in a totally new location of "Media".

Apple has already developed advanced hearing aids that can be synced and managed by your phone, but iOS 8 includes *Multi-device support for Made for iPhone (MFi) hearing aids*. While there isn't much information out there yet, it appears that with iOS 8 users will be able to manage their hearing aids on multiple devices as opposed to just one.



OUR FAVORITE APPS





OUR FAVORITE APPS

With the overwhelming amount of apps available it can be difficult to find quality apps. In this section, you'll learn about some of our favorites. The apps we discuss are highly rated and used by many Speech Pathologists, Special Education teachers, and parents. It's important to note that we have no involvement with the following apps and we were not paid to endorse them. We've simply had great experiences using them and love to spread the word about high quality multi-purpose apps.

We'll discuss apps for Communication, Language, and then get into good apps that can benefit all students. If you have had good experiences with other apps that we haven't listed here, be sure to get in touch with us to tell us about the app. In future versions of this eBook, we'll update our list to make sure we get all the best apps out there!



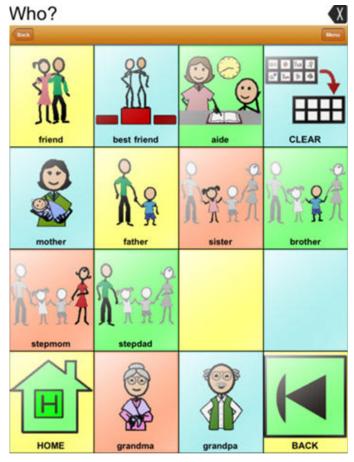
Apps for Communication

Some people use the iPad as a communication device. This means that it will speak messages out loud for people who cannot use their own voice to speak. These apps are set up with multiple pages representing different categories or topics of conversation. The come with standard pre-made pages and let users create their own, customized to the user's needs. Common pages included are "about me", "food", "drink", "I want", "school", "health", and "places". Users can also make their own pages, based on the most important messages for their life. You can usually import your own pictures into the app as well.

Some examples of these are <u>TouchChat</u>, <u>Proloquo2Go</u>, and <u>TapSpeak Choice</u>. These are some of the most high quality and comprehensive AAC apps out there. Therefore they are the more expensive options. Proloquo2Go retails for \$219.99, while TouchChat is \$149.99, and TapSpeak Choice is \$169.99. They take time and practice to be able to use and build comprehensive pages. Customers are encouraged to determine the needs of the user before purchasing one of these apps over another. Research the current features and determine what the user needs in order to successfully use these tools. Instructional resources and training videos are available on their websites.

Additionally, many of these apps have Resource Centers located across the country that will allow you to come in and try the app before purchasing. Those services aren't provided by every developer, so check the developer's website for more info.

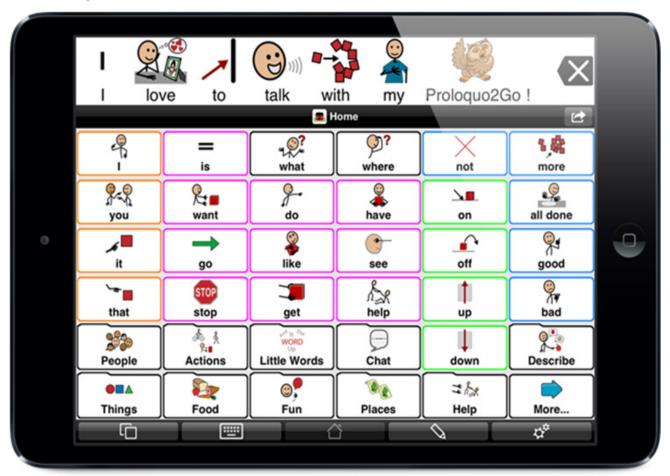
TouchChat (\$149.99) is available on the iPhone, iPod, and iPad on iOS 4 and later. The symbols it uses are pictures (digital/actual pictures or icons which are drawn pictures to represent the word), alphabet for spelling, words, pictures with labels, and digital photos taken by the user. Users can import visual scene displays and videos. Visual scene displays are pictures of a familiar scene such as a kitchen or restaurant with built in communication support. When users tap on the picture they hear vocabulary associated with the picture. In a kitchen picture, they can tap on a refrigerator, dishwasher, or sink and hear the words spoken out loud. Visual displays aid communication by providing context for the listeners, promoting conversation, and aiding memory to retrieve the words. They have been used in treatment for Aphasia and can be helpful for people who utilize AAC.



Sample board from TouchChat

The vocabulary pages in TouchChat are laid out in a grid ranging from 2-42 squares on the iPad and 2-24 on the iPhone or iPod. There is a removable message bar that will display what has been selected. For example it will say "I want orange juice" when the user taps on those icons. It comes with 10,000 pre-made icons from SymbolStix (a widely used library of symbols in the form of stick figures from Crick Software). The keyboard has a typical keyboard, called a QWERTY style, word prediction and grammar, and categories to organize phrases. Users can use one of the 7 the voices it comes with or record their own labels for the vocabulary they use. The app comes with premade vocabulary pages which you can customize and many more for purchase. The scene pages are nice because you can add a lot of vocabulary around one topic. Another great feature is the buttons can have actions such as linking to a new page, adding letters, or copying text.

Proloquo2Go (\$219.99) can be used on the iPhone, iPod, and iPad on iOS 4.2 and later. The symbols available are the alphabet for spelling, words, pictures with labels, and digital photos that the user takes. The display ranges from 2-64 squares per page with the option to swipe for more pages. It also comes with an optional message bar. It comes with 8000 pre-made icons from SymbolStix. The keyboard is the typical QWERTY style and offers word prediction for faster typing. The only voice output is text-to-speech (no ability to record). It comes with a variety of boy/girl or male/female voices. The app comes with premade vocabulary pages which you can customize and make simpler. Some additional nice features are the ability to change the size of message buttons and the large amount of nouns it has in its vocabulary.



Sample board from Proloquo2Go

TapSpeak Choice (\$149.99) is also available on the iPhone, iPod, and iPad. Boards can range from simple communication boards with a small number of choices to dynamic pages which link to additional vocabulary. Pages can have one to fifty-six buttons. They offer various options for motor limitations such as an Anti-Stimming page, Touch Mode, Tap Mode, Scanning, and Switch Support. The buttons can be text, pictures from their library, or photos from your iPad library. A different symbol set is offered in TapSpeak Choice. It's called the Pixon™ symbol set from Semantic Compaction Systems. As for keyboards, they offer an iPad-like keyboard, alphabetic keyboard, and a scan-friendly keyboard for people using switch devices to access the iPad. This app was designed to be compatible with switches. The message window, button size, and text size are all customizable as well.



Sample board from TapSpeak Choice

Customizable Communication Apps

There are many less expensive apps that aid communication in different ways. The apps listed below are affordable options that help children learn language, communicate messages, and make choices. The apps below are customizable which is important for children with special needs. These apps lets the users create their own boards using their own pictures, voices, or text, which allows the very different needs of our children or students to be met. The ability to make your own materials makes these apps incredibly versatile as well. It's up to you to decide how to use the app!

<u>Bitsboard</u> is a free app that teaches language, reading, and spelling. It comes with many different types of activities such as memory games, flashcards, spelling games, and more. You also get access to a large library of categories and have the ability to create and edit your own boards which can be used in any of their activities (the flashcards and games).

<u>SoundingBrd</u> is another free app. It's made by <u>AbleNet</u>, a popular company who make many assistive devices for the special needs population. This app lets you make your own communication boards, which are messages spoken out loud to communicate with others. It also comes with pre-made boards.

<u>Choiceworks</u> is a fantastic app that helps children learn routines, understand and express their feelings, and learn to wait. For \$6.99, users can make their own schedules, set up timers, and make feeling pages. You can choose to use the preloaded images or select your own from your photos. This app works especially well with children on the Autism spectrum.

ChoiceBoard Creator is a free app that works on making choices for children who have difficulty communicating their wants and needs. It can also be used to teach vocabulary. This app lets users create their own board by adding in their own pictures and recordings. The template is three boxes that you can fill with images and sounds. The child taps on the one they want (or the correct answer if playing a game).

Our app, <u>Let's be Social</u>, helps teach social skills to anyone who has difficulty learning how to behave in social situations and/or communicate with others. For \$14.99 it comes with many pre-made lessons and allows the user to make their own lessons by adding their own pictures and text.

Language Apps

The following apps help children learn and use language. All of these come highly recommended and are widely used for speech therapy. These apps can be used with children of all ages and all abilities. You'll have to decide which apps are appropriate for your children or students, depending on where the child is cognitively and their level of language understanding.

<u>ITooch Elementary School</u> is one of many educational apps made by eduPAD Inc. Their apps include learning Math, Language Arts, and Science and are made for many different grade levels. Their Language Arts apps are the most beneficial for learning language. We have used the Elementary School and Middle School version and love both. The Elementary School Language Arts app comes with activities for the following categories: Writing and Composition, Reading Comprehension Strategies, Recognizing Points of View, Drawing Conclusions, Vocabulary Booster, and Sequencing Ideas. Many students have difficulty with these concepts from elementary school into high school. <u>iTooch Middle School</u> comes with the categories of Main Idea and Supporting Details, Identifying Author's Purpose, Writing Sentences, Grammar, and Vocabulary Booster (which has the fantastic activity *Words with Multiple Meanings*). These activities can also be used with a wide range of ages.

My PlayHome is a free app that can be used for many different purposes. This app is a virtual dollhouse that the user can move through. The lite version is free and comes with a living room and kitchen scene with five characters to use. There are so many ways to target language with this app. The living room and kitchen scenes include opportunities to work on household vocabulary, food, colors, verbs, and many linguistic concepts such as on/off, up/down, day/night, and open/close. Children who are typically developing or developmentally delayed can use the app. The opportunities for encouraging language are endless with this free app.

The <u>Speech with Milo Series</u> has multiple apps with varying topics. The character Milo is a mouse that acts out different words. The user has the chance to repeat the word, listen to a sentence with the word, or move on. The series include an app for nouns, verbs, adjectives, prepositions, sequencing, articulation, interactive storybook. They have Spanish versions as well. The prices range from \$1.99 for the storybook app, \$2.99 for the parts of speech, and \$6.99 for the articulation board. This set of apps can be used with neurotypical or developmentally delayed children of many ages.

<u>Coloring Studio</u> or any free coloring apps are great to have on your iPad. These types of coloring book apps are very helpful in therapy sessions. If your lesson isn't going as planned and you need a backup plan fast it might be time to take out the coloring app. This is a way to work on colors, following directions, labeling vocabulary, and taking turns in a fun way. It could also be used as a reward at the end of a session. This is a must have in the SLP bag of tricks.

Skitch is a free app from the creators of Evernote (see Apps for All Students). In this app, you can take or a picture or choose a picture from your iPad's camera roll or from the web. Once you have a fun picture for the background the student can draw, write, add boxes, crop, and add stickers to the page. This is extremely motivating for reluctant students working on forming sentences. Another fun and free app!

Let's Use Language is our newest app designed to teach the language concepts of vocabulary, sequencing, categories, and opposites. The app is comprised of engaging stories followed by questions. Written by certified SLPs, its story based approach provides context for language learning. It comes with 40 lessons that support Common Core Standards as well as the ability to create your own lessons with your own images. It's available in the App Store for \$14.99.

Apps for All Students

The following apps are useful to all students, no matter their learning profile. The items below are helpful for studying skills, organization and productivity. Whether the student has learning disabilities or not, all of these apps are helpful for the everyday tasks which school requires. Best of all, most of these tools are free and they all are highly rated! Again, we are not paid to endorse any applications or products.

<u>Dropbox</u> is an online filing cabinet that is extremely useful for students. Dropbox installs a folder on your device (just like any other folder on your computer), and the folder is connected and synced over the internet, so once a document, picture, or video is saved in Dropbox it can be accessed from any computer or device! No more "I forgot my paper" excuses! This is an app for Apple devices but also can be used from the <u>website</u>, your PC, Android, Kindle Fire, and Blackberry.

<u>Scribd</u> is a free online library. Users can find books, published research, how-to guides, analyst reports, business presentations, and spreadsheets. Students will find pre-made and shared study guides on the topics they search. The features include syncing, saving, and sharing.

<u>Dictionary.com</u> is available for a free version or a full version for \$4.99. The features on the iPad include search without internet connection, thesaurus, translator, and voice activated search-which makes it really easy to use for those who have trouble typing. The only difference between the free and purchase version are the free one has ads in it.

<u>Evernote</u> is a free productivity app used to take notes, keep organized, and make to-do lists. Some useful features include the ability to record voice notes, save and share files, organize notes by tags, connect notes to other apps and products, and best of all sync across your computers and devices. Evernote is also available on Android, Windows, and Blackberry. In addition to the Evernote app, the Evernote product suite has a number of apps all for different productivity purposes. Below are two more apps in the Evernote family.



<u>Evernote Peek</u> is another app that is part of the Evernote product family. Evernote Peek helps create study material by connecting to your Evernote account and turning your notes into flashcards. The note title becomes the clue and the note itself will be the answer. Students can quiz themselves by lifting their iPad cover to see a hint and lifting the entire cover to see the answer. This is also free!

As previously mentioned, <u>Skitch</u> lets users mark up a picture, PDF, screenshot, or make their own images with writing, arrows, stamps, and shapes. Students can use this for annotating notes or pictures from class or a textbook. This app can provide note-taking practice for college when the ability to take comprehensive notes during lectures is a necessary skill.

<u>inClass</u> is another note-taking app with the feature of joining a "study room" to share notes and collaborate with classmates. It offers many of the features as similar apps on this list (notifications of tests and tasks, syncing, and sharing). Best of all it is free.

<u>iStudiez Pro</u> lets you track tasks and deadlines, plan homework, and organize schedules. Features for students include built in planners, notifications which will remind you of due dates and tests, and the ability to email these reminders to yourself. The Lite (free) version limits the amount of courses, classes, assignments, and instructors you can add in to keep track of. The Pro version of the app is \$2.99.

<u>iThoughts</u> is a highly rated (five stars!) app which enables the user to map out their thoughts and visually organize information. This would be useful as a teaching or studying tool, as well as a therapy resource/visual for SLP's teaching new concepts. To build a map of your topic you can add in various colors, shapes, notes, hyperlinks, clipart and pre-made backgrounds, doodle, and embed documents. It can also be used for visual thinkers to map out plans or projects. The user can add in start and end dates, track progress, hide completed tasks, and email tasks out. This app is available for \$9.99.





CONCLUSION

It's been quite a journey! You've gone from an iPad newbie to a true pro, impressing your co-workers with your knowledge. You know about all the best apps and are always finding new gems to use in your sessions. You use *Guided Access* to keep your activities running as smoothly and efficiently as possible and have brought your classroom to the next level. Whenever a colleague is having trouble with an app, you quickly ask, "What iOS are you running?"

So what's next? Well, that's what we want you to tell us! Are there concepts or settings you don't understand? Anything you'd like us to expand on, or any new features you learned about elsewhere that we should add? We want to hear from you! Send us a note here, or get in touch via Facebook or Twitter.

It's an exciting time to be an iPad user. As Apple releases iOS 8, new iPad models, furthers their support for the Special Needs community, and the iPad continues to take over the world, new features are going to pop up that advance the technological revolution in Special Education. In the four years since the iPad was released, the game has changed. We can't wait to see what's going to happen in the next four!

We will continue to make updated and revised versions of this eBook available on our <u>website</u>. If you're interested in hosting a speaking engagement or training on the iPad, contact us here.



About the Authors

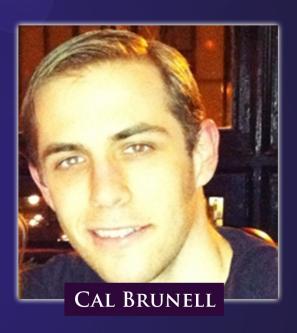


Brittany Lehane is a certified Speech-Language Pathologist working in public schools. She also provides Assistive Technology assessments and consultation to surrounding districts. As a Co-Founder of Everyday Speech, she wrote all of the lessons in the company's first two apps, *Let's be Social* and *Let's use Language*. Her weekly blog posts on speech topics and assistive technology can be seen at the company's website, www.myeverydayspeech.com. She is available for speaking engagements/trainings on Assistive Technology and iPad use in Special Education and Speech Pathology. To get in touch with Brittany, email her at brittany@myeverydayspeech.com.

Twitter: https://twitter.com/Britt_Lehane

LinkedIn: https://www.linkedin.com/in/brittanylehane

Cal Brunell is a Co-Founder of Everyday Speech. Together with Brittany, Cal helps create innovative products for Speech Pathology and Special Education. He assists in product development and helped design and build the company's first two apps, *Let's be Social* and *Let's use Language*. He is currently working on an app to help children recognize and understand emotions. Cal also assists Brittany during her speaking engagements and trainings. To get in touch with Cal, email him at cal@myeverydayspeech.com.



Twitter: https://twitter.com/Cal Bru

LinkedIn: https://www.linkedin.com/in/calbrunell

Glossary of Terms

Accessibility Features A set of features designed by Apple to assist those with

different impairments, including Physical & Motor, Vision, and Hearing. Accessibility Features are found in General Settings.

App Short for "application", an app is software program that you to

do a task. An email app allows you to access, read, and respond

to email.

App Icon The square image that appears above an app's name on your

home screen or in the App Store.

App Store Apple's marketplace for purchasing and downloading apps.

Apple ID Your account for Apple products and services. Using an email

address, you can store your credit card information, save apps and products you've downloaded, and restore backups.

Augmentative and A term for communication methods used to supplement or

Alternative replace speech for those with impairments in the production of

Communication (AAC) speech.

Backup A copy of your iPad's content; if you lose data, you can restore

your content as it appeared at the time of the backup.

Badge A small red icon in the corner of an app with a number that

represents the number of notifications that app has for you. A common example is the number of unread emails in your inbox

on the standard *Mail* app.

Control Center A quick way to toggle settings on and off. To access Control

Center, swipe up from the bottom of the iPad screen.

FaceTime Apple's video calling software. FaceTime allows you to use your

iPad for video calling to other iDevices.

Guided Access An Accessibility Feature that limits actions taken within an app.

Guided Access can be employed to restrict a user from leaving an

app or pressing certain buttons.

Home Screen The screen you see when you aren't in an app or settings. This is

where all of your apps are organized. The home screen includes

multiple app pages and a bottom bar of apps.

iCloud Apple's cloud hosting. You can store backups and other

information such as photos online. You can sync data across

multiple devices and access your content anywhere.

iDevice Generic term for all Apple devices, including iPhone, iPad, and

iPod.

iMessage Apple's messaging platform. iMessage allows you to send text messages to phone numbers and Apple ID emails using the internet instead of a cellular network. iMessage only works when messaging between iDevices.

In-App Purchases (IAP) Content or functionality that is available for purchase within an app for an additional fee, on top of the initial download fee. In-App Purchases expand the app beyond the base version.

IOS The operating system that comes standard on any iDevice. Analogous to Microsoft Windows for PC's, iOS is the software that supports the basic functions of iDevices. iOS is continually updated, and apps may function differently based on the version of iOS you are running.

Location Services Feature in iOS that uses your current location to improve your experience. Search for businesses around you, get local weather, or find where your missing device is.

Mobile Device An Apple feature used for Volume Purchases, MDM allows **Management** users to install, transfer, and remove apps from a remote location, without having to access the user's device.

Notification Center A listing of all notifications you've received from your iPad and individual apps. To access Notification Center, swipe down from the top of the iPad screen.

Passcode A password you have to enter to be able to access the iPad. The default is a *Simple Passcode*, which is a 4 digit number. Complex passwords can be strings of characters, similar to standard web passwords.

Rating A user's rating of the quality, effectiveness, and general satisfaction of an app's performance on a 5 star scale.

Review Comments left by users to add context to their *Rating*.

Siri Your iPad's virtual assistant. Siri takes voice commands and performs tasks, such as writing emails, creating appointments, setting reminders, or doing Google searches. For a long list of Siri commands, visit this link.

TouchID Feature that allows users to access their device and make purchases using their fingerprint rather than a passcode.

Anticipated to be in the newest iPad version.

Voice Dictation Feature in the iPad keyboard that allows users to speak their message rather than type it.

VoiceOver An online screen reader that responds to different gestures rather than standard taps and swipes. Visually impaired users can control the entire iPad without having to see the screen.

Volume PurchaseProgram
Program provides discounts for volume purchases of apps and other content.