Getting Started with Apple iOS Devices

A guide for using iPad, iPod touch, and iTunes
for K–12 teaching and learning

Contents

Foreword

Educators all over the world are examining the tools and learning environments required to develop the 21st century skills students need to succeed in school, work, and life. Many are already achieving great results using mobile devices such as iPad and iPod touch in their classrooms.

The flexibility of these iOS devices allows teachers to address the unique learning needs of a range of learners, support second language learners, engage struggling students across subject areas, and even advance their own professional development. And because iPad and iPod touch are portable, teachers and students can learn where and when they want.

iPad and iPod touch can deliver large quantities of academic content to students in an efficient and convenient manner. The seamless integration of Apple's iOS devices and iTunes makes it easy for teachers to provide textual, auditory, and visual resources to all types of learners, including those who need extra assistance.

iPad and iPod touch are also great productivity tools to help you organize and manage routine administrative tasks. Need to research something or find directions to a meeting? With iPad and iPod touch, you can quickly access the Internet. Have a presentation to give? Use Keynote to develop and present your content right from iPad.

This Getting Started guide is meant to help you begin creating an environment for anywhere, anytime learning. You'll learn the basics of iPad, iPod touch, and iTunes. Whether for one user or an entire class, you'll also discover how to effectively set up, maintain, and manage iOS devices in the classroom. And you'll explore several curriculum ideas for using iPad and iPod touch as part of a 21st century learning environment. Because Apple products have similar, easy interfaces—and its mobile devices run on the same operating system—it won't take long to begin using these innovative tools with your students.

As many educators have experienced, using iPad, iPod touch, and iTunes in your classroom puts the power to effectively teach and learn in your and your students' hands, both literally and figuratively.

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Overview

About iOS Devices and iTunes for Education

As many educators have discovered, iPad and iPod touch are easy-to-use iOS devices with a variety of classroom uses. (They're called *iOS devices* because they use the Apple iOS operating system.) Students use iOS devices to interact with educational apps, watch educational videos, listen to audio recordings or podcasts, view primary source images, read textbooks and other course materials, and do research online.

With the apps on iPad and iPod touch, you and your students can send and receive email, take notes, make to-do lists, keep calendars and contact files, and much more. And the tens of thousands of education apps available for download from the App Store expand learning even more. Students can be highly engaged in viewing the stars, learning a language, reviewing math facts, practicing vocabulary and grammar skills, learning about historical events, and much, much more.

With iPad 2 and later and iPod touch (4th generation), students can also take photos, use FaceTime for video calls, and make HD movies on the go with the built-in camera, then use the iMovie app to edit them. With Keynote, Pages, and Numbers (available from the App Store), they can create presentations, many types of documents, and spreadsheets. And they can browse, edit, and share their photos with the iPhoto app.

iPad and iPod touch make it easy to copy and paste from app to app, such as text from a web page to a note. You can even connect the devices to a TV or projection device with an added accessory (see "Accessories for iPad and iPod touch" later in this guide) to display slide presentations and other content. And when you connect an iPad to an HDTV or projector with the Apple Digital AV Adapter or Apple VGA Adapter (sold separately), video mirroring allows the class to see everything on your iPad display.

It's easy to load files, apps, photos, songs, and video content onto iPad and iPod touch. You can download media and apps directly to your device with a Wi-Fi connection. Or you can connect directly to a Mac or PC using the dock connector on the bottom of the iPad or iPod touch and the included USB cable. Then you can use iTunes to organize your content, sync (copy files onto the device), and recharge quickly.

This guide focuses on the capabilities of iPad and iPod touch (note that the features discussed pertain to iOS 5 as well as iPad 2 and later). If you have the first version of iPad, some features won't apply, such as Camera, FaceTime, Photo Booth, iMovie, and ubiquitous video mirroring.

If you're determining whether to use iPad or iPod touch with your students, evaluate your students' needs and your plans for using the devices. For example, the smaller size of iPod touch may be an advantage for learning on the go, younger students with smaller hands, or language acquisition. Or you might choose iPad when students will benefit from the larger screen size or need to create more content.

For detailed information about iPod touch specifications, including hard drive size, battery duration, and included accessories, visit www.apple.com/ipod. For detailed information about iPad specifications, visit www.apple.com/ipad.

Why iPad, iPod touch, and iTunes for Education?

Innovative educators are using iOS devices and iTunes as powerful educational tools to meet students' academic needs and to help them achieve 21st century literacy. Here are just some of the reasons:

• iPad and iPod touch, like Apple's other iOS devices and computers, are familiar, easy to use, and exciting for students. And the Multi-Touch screen means students can read a book, explore an app, page through websites, and much more with just the touch of a finger.

• Portability, instant on, and long battery life give students anytime access to learning from any location.

• iPad and iPod touch can be personalized to support students' individual learning styles and needs with tools like customized playlists, built-in accessibility features, support for more than 30 languages, and specific education apps. And students can access content as many times as it takes them to master it.

• iOS devices engage students with their education—students actively participate in and focus on the learning process, no matter what their learning style. They can also use iOS devices to create their own content, such as movies and music compositions.

• iTunes U is the world's largest online collection of free education content, including complete courses, videos, podcasts, audiobooks, PDFs, and more. You can access it all on iPad and iPod touch with the iTunes U app, available free from the App Store. What's more, the web-based tool iTunes U Course Manager offers an easy way to create and publish your own course materials to distribute to your students and others.

• With a Wi-Fi connection, students have anytime access to the Internet as well as to printers on the wireless network. And Bluetooth offers connection with a wealth of other tools, such as digital microscopes, science probes, and keyboards.

• Education apps from the App Store offer limitless avenues for exploring new subjects, reinforcing learning, expressing creativity, helping with organization, and much more.

• iPad and iPod touch give all types of learners versatile and amazing ways to read— from reading Multi-Touch textbooks and other books with iBooks, which gives you access to a dictionary and other tools with a tap of the finger, to a wealth of audio-books and other interactive book apps.

• Students and educators have a valuable collection of productivity tools in just one device—for taking notes, keeping track of dates, browsing the Internet, sending and receiving email, and more.

• With built-in features and apps from the App Store, iPad and iPod touch offer a broad range of accessibility tools to address students with special needs such as visual and auditory impairments.

These are just a few of the reasons educators are finding iPad and iPod touch so valuable for teaching and learning with today's students. The rest of this guide offers information and suggestions for using these amazing devices in your classroom.

iTunes at a Glance

iTunes is an application for organizing and playing digital audio and video content. It has an easy-to-use interface for managing the content on iPad and iPod touch. You can set up iTunes so that when an iPad or iPod touch is connected to a computer, the iTunes library automatically syncs to that device.

iTunes is also used to connect to the iTunes Store for downloading free academic content from iTunes U, apps from the App Store, podcasts, music from around the world, audio and digital books, full-length movies and TV shows, speeches, and more.

Apple TV lets you view the contents of an iTunes library, such as movies and TV shows, on a classroom television. iTunes is compatible with both Mac and PC and comes preinstalled on every Mac computer. It's available as a free download at www.apple.com/itunes/download.

Adding content to your iTunes library is as easy as downloading it from the iTunes Store or importing it from a CD. The iTunes library can hold a collection of digital audio and video files, such as music from a CD, video files downloaded from iTunes U, apps downloaded from the App Store, and audiobooks purchased from the iTunes Store. As an iTunes collection grows, you can maintain multiple libraries for classroom use.

In iTunes, you can organize songs and other items into playlists. Adding a file to a play-list doesn't duplicate it—it's simply an alias, or pointer, for the actual files in your iTunes library. The sidebar displays all of your playlists.

You can create playlists to organize iTunes content for a specific student project or for a particular class. For example, if you are studying the American Civil War, you could create one playlist with songs from that time period and video clips from iTunes U. You can also create Smart Playlists that automatically update according to criteria you set—e.g., podcasts you've added in the last month. And you can use playlists to set up digital portfolios for students to collect and assess their work throughout the school year.

To access the iTunes Store, click iTunes Store in the iTunes sidebar when you're con-nected to the Internet. As you download free or purchased items, iTunes automatically adds them to your library. To learn about the iOS device settings in iTunes, see "Using iTunes on a Computer to Add Content" later in this guide. For links to more detailed information about iTunes, see "Resources" later in this guide.

Managing iOS Devices and iTunes for Student Use

This section provides suggestions for managing iPad, iPod touch, and iTunes in your classroom. Because iPad and iPod touch are designed to be paired with one computer or user account, the way you use these devices will determine how you decide to set up user accounts.

Getting Students Up to Speed

Most students won't need instruction on how to use iPad or iPod touch, but you might want to review specific items such as how to access different types of content and how to start and stop an audiobook or movie. You also may want to show the class how to use iTunes and the other applications they'll be using.

Managing iPad and iPod touch in the Classroom

There are different scenarios for managing the use of iOS devices in the classroom, which vary depending on whether you assign students their own devices and how you manage syncing and transferring content. Determining who will own purchased apps and content should shape this strategy. Although there are many possible ownership models, three are commonly used in schools, each of which focuses on who owns the content rather than the device:

• With the personal ownership model, the education institution purchases the content in volume and transfers it to the individual user (the student, faculty member, administrator, or other staff member), who then owns the content and manages his or her account. This is similar to the model you use with your own devices.

• With the institutional ownership model, the education institution retains ownership of the content. School computer labs often use this strategy.

• With the layered ownership model, content from both the user and the institution can coexist on the same iPad or iPod touch. This approach blends both the personal and institutional ownership models.

For more information, see the "Deployment Strategies" chapter in the "iOS 5 Education Deployment Guide," available at http://images.apple.com/education/docs/IOS_5_Education_Deployment_Guide.pdf.

Volume Purchase of iOS Apps

There are many ways for institutions to purchase iOS apps. Education users, like all iTunes users, can use credit cards or gift cards to fund individual app purchases. To purchase apps in volume, education institutions can use the App Store Volume Purchase Program and fund purchases via Volume Vouchers, purchase orders, credit cards, PCards, or PayPal accounts. Tax-exempt institutions aren't charged sales tax when purchasing apps through the Volume Purchase Program. After purchase, the education institution can then distribute the apps to multiple devices (terms and conditions

apply). The program also allows app developers to offer special pricing for purchases of 20 apps or more. K–12 and degree-granting higher education institutions in the United States qualify for participation in the Volume Purchase Program.

For more information, see www.apple.com/education/volume-purchase-program.

Managing Settings on iOS Devices

There are three ways to configure and manage settings on iOS devices: manually, using configuration profiles with the Apple Configurator app, or using a Mobile Device Management (MDM) solution.

Restrictions and configuration information can be set directly on each iOS device. This is the simplest configuration method but requires manually entering settings on each device. This may be best when there aren't a lot of devices to configure or when you're doing your own setup of classroom devices.

Instead of doing setup on each device, you can use the Apple Configurator app to quickly configure large numbers of iPad and iPod touch devices with specified settings, apps, and data. Apple Configurator can be used to distribute apps purchased with the Volume Purchase Program, free apps, and other app-based content such as Keynote presentations, Pages documents, or any documents for apps that support iTunes file sharing.

iOS MDM capabilities allow schools to securely enroll devices in their network, wirelessly configure and update settings, monitor institution policy compliance, and remotely wipe or lock managed devices. MDM solutions are provided by third parties, offering support for a variety of server platforms, management consoles, additional features, and pricing structures.

OS X Server from Apple includes Profile Manager, a server-based solution for remotely managing iOS devices and Mac systems that are using OS X Mountain Lion. Profile Manager simplifies the creation of user accounts for mail, calendars, contacts, and chat; enforcement of restrictions through Mobile Device Management; PIN and password policies; and more. Integrated with the Apple Push Notification service, Profile Manager can automatically send out updated configurations wirelessly over the air. Learn more about Profile Manager at:
www.apple.com/osx/server/
help.apple.com/profilemanager

Consult with your school or district technology staff about determining and setting up the best method for your environment. For more information about these options, see the "Configuration and Management" chapter in the "iOS 5 Education Deployment Guide," available at http://images.apple.com/education/docs/IOS_5_Education_ Deployment_Guide.pdf.

Keeping Track of Student iOS Devices

Mobility is a powerful aspect of iPad and iPod touch. Like textbooks, notebook computers, and other learning tools that may go to and from school with students, you probably will want to asset-tag the devices using the same type of tags or barcodes you do for other items. If the library manages the devices, you can use the same checkout system as for library materials.

If you're checking out iPad or iPod touch devices from your classroom, a sign-in/sign-out sheet helps keep track of them. Along with asset tags, consider numbering each iPad or iPod touch so you know who is using each device. When you first set up an iOS device, you're prompted to name it. You can use these same names when you set up your student checkout system.

Another management idea is to purchase inexpensive small plastic containers and put together an iPad or iPod touch checkout kit containing a device, headphones, and a USB cable. Take a photograph of what should be included in the kit and tape that photo to the plastic container.

Sharing iOS Devices

Along with checking out iPad or iPod touch devices to take to and from school, there are other ways students can share them. If you don't have a class set of devices, you can assign one iPad or iPod touch to a group of students, using a project-based learning approach. You can also use an audio splitter, like the Griffin SmartShare, to allow two students to share one device.

You can effectively use just one iPad or iPod touch to record audio with a group of students—simply pass the device from student to student, having them record a reading passage for assessment or narration for a story. It's a good idea to have each student say his or her name at the beginning of each recording for easy identification later. (For more information, see "Using iPod touch and iPad for Voice Recording" and "Accessories for iPad and iPod touch" later in this guide.)

Mobile iOS Learning Solutions

Apple offers convenient ways to manage multiple devices in the classroom. The Apple iPad Learning Lab is a portable system that comes with a set of 10 iPad devices and a fully assembled, sturdy, and secure Bretford PowerSync Cart. The cart can store, charge, and sync up to 30 iPad devices and has extra storage space for a MacBook Pro or MacBook Air computer. The cart rolls easily around the school, so multiple classes can use it, and it can be locked to secure the devices when they're not in use.

You can manage your classroom iPod touch devices with the Apple iPod Learning Lab, which comes with a classroom set of 20 iPod devices and a fully assembled Bretford PowerSync Cart. With the cart, you can charge, store, and transport up to 40 iPod devices at one time and sync 20 at a time to the same computer. The cart is compatible with all iPod models with dock connectors and ships completely assembled. The cart also has flexible storage space for up to four MacBook computers and a variety of iPod accessories such as earphones.

You can purchase a preconfigured Apple iPad Learning Lab or Apple iPod Learning Lab or build your own lab to meet your school's specific needs.

For more iOS portability, you can use the Bretford PowerRack for iPad, designed for iPad and also compatible with iPod touch, to store and charge up to 10 devices. And with the Bretford PowerSync Tray for iPad, you get the added functionality of charging, syncing, storing, and securing up to 10 iPad devices. The Bretford PowerSync Case for iPod organizes, charges, and syncs up to 20 iPod devices and keeps them securely stored in a durable hardshell case. If you already have iPad or iPod devices, the carts, tray, rack, and case can be purchased separately.

For more information on these mobile learning solutions, visit www.apple.com/education/labs.

Viewing Content with Apple TV

With Apple TV, you can easily show the class any content on an iOS device or in your iTunes library, such as photos from a field trip, documentary movies you've downloaded or that the class has produced, spreadsheets, iTunes U videos, and more. To use Apple TV, connect an iPad or iPod touch to an HDTV or a display with a video output cable.

Or play your content wirelessly with AirPlay—when your iOS device and Apple TV are connected to the same Wi-Fi network, an AirPlay icon appears. Tap the icon to mirror anything being shown on the device.

To learn more, visit www.apple.com/appletv.

Using Apps on iPad and iPod touch

The built-in apps on iPad and iPod touch offer a set of valuable resources that support teaching and learning in the classroom. In addition to using the built-in apps, you can further enhance teaching and learning by downloading apps from the App Store. You can choose from an amazing collection of apps, many of which are free and designed specifically for education.

Using Built-in Apps

With the apps built into iPad and iPod touch, students can listen to downloaded audio files, view video content, browse the Internet, take notes, use a calculator, check email, create and sync calendars, and more. This section provides an overview of many of these apps.

Videos

With the Videos app, you can view video downloaded from iTunes, including free education movies in iTunes U, feature films, TV shows, video podcasts, and instructional media. Also, both devices integrate seamlessly with iMovie on the Mac and movies created with the iMovie app on iPad, so student productions can be viewed on the go.

To play a movie, tap Videos, then tap the video you want to watch. On iPod touch, videos automatically play in widescreen to take advantage of the full iPod touch display. On iPad, you can view movies in either portrait or landscape mode. To display the video controls, tap the screen once; tap it again to hide them.

Camera

Use the Camera app to take photos and capture video with the built-in camera. The third-generation iPad, introduced in March 2012, features a 5-megapixel iSight camera with advanced optics, a backside illumination sensor, auto white balance, and face detection to take great still images. This camera also records 1080p HD video.

Tap Camera, then drag the slider at the bottom right to choose to take photos or video. To take a photo, tap the Camera button at the bottom center of the screen. To capture video, tap the Record button at the bottom center of the screen; tap it again to stop filming. You can then use the iMovie app to edit your video and the iPhoto app to edit your photos. (See "Creating Content on an iOS Device" later in this guide.)

You can email photos or video taken with Camera right from the app. You can also choose photos to set as wallpaper (background images for the Home screens of iPad and iPod touch). And you can sync photos and videos to a Mac for students to use in projects they create on the computer, such as podcasts, movies, presentations, documents, or photo books.

Photos

With Photos on iPad and iPod touch, you can view photos and images transferred from your computer, saved on the device, or taken with the device's camera. View photos in portrait or landscape orientation or as a slideshow. Tap Photos to see the images available on the device. Tap to display photo controls. Double-tap an image to zoom in.

Safari

With Safari and a Wi-Fi connection, you and your students can browse websites and search for information on the Internet, including Google searches. For example, you can use the Safari app to readily access the wealth of resources available from the Discovery Education website (www.discoveryeducation.com). With Safari on an iOS device, students can do research both in and out of the classroom and can have up to eight web pages open at a time. They can also download and view PDF files.

You can add bookmarks on a computer and sync them to iPad or iPod touch, which is particularly helpful if you want to provide students with a group of websites to use for research. Or you can add bookmarks directly on the iPad and iPod touch. You can even add a frequently used website to the device's Home screen for easy access.

Websites can be viewed in either portrait or landscape orientation—just rotate the device to change the orientation. Double-tap or pinch to zoom in and out on a web page.

Notes

Notes, which has a yellow notepad icon, lets you easily add, read, and revise notes on iPad or iPod touch. If the device is set up for email, you can also email notes that you've created. Notes can be synced with the Mail application on a Mac. Notes have many uses, such as meeting summaries of students' collaborative projects, taking notes during a presentation, capturing learnings from a field trip, and more. And because you can copy and paste text with the device, you can copy text from a web page or an email and add it to a note, or copy text in a note and add it to a Pages document.

To add a note, tap Notes, then tap the Add button (+). When you're finished typing a note with the keyboard on iPad, tap the Keyboard icon. When you're done typing a note on iPod touch, tap Done. With both devices, tap the envelope at the bottom of the screen to email your note. To view a list of all your notes, tap Notes in the upper left of the screen.

Mail

To send and receive email with the iOS Mail app, you need to add email account details to the device's Settings, or add them in iTunes when the device is connected to your computer. You can send and receive photos and movies and view attached PDFs and other files.

Calendar

To keep track of important dates or school schedules, you and your students can use the Calendar app. You can enter and edit calendar events directly on the device. Students can use Calendar as an organizational tool as well, for example, by setting a time to work on a project with an alert to remind them to get started. You can also create calendars using Calendar (included with every new Mac) or Outlook, such as a class calendar with due dates for projects, holidays, field trips, and other school activities, and then sync the calendar to iPad or iPod touch to share with the class.

FaceTime

Use FaceTime and a Wi-Fi connection to participate in video calls with others who are using iPad 2 or later, iPod touch (4th generation), or iPhone 4 or later. The 5-megapixel iSight camera included with the third-generation iPad (introduced in March 2012) makes video calls even more compelling.

To get started, tap the FaceTime app and tap the name of the person to call from your Favorites list. An invitation appears on that person's device asking if he or she wants to join you. When the person accepts, the video call begins.

Contacts

You and your students can sync contact information to iPad or iPod touch from Calendar on a Mac, Google Address Book, Windows Microsoft Outlook, or Microsoft Exchange. You can also add contact information to the devices directly.

To view all the people on your contact list, tap the Contacts icon. To add a contact, tap the Add button (+). Enter the contact information for that person and then tap Done.

Settings

With the Settings app, you can set your wallpaper image, screen brightness, and settings for network, accessibility, email, web, music, video, photos, and more. You can also set auto-lock and a security passcode and restrict access to explicit iTunes content and certain apps.

To view or adjust device settings, tap Settings, and then tap a category on the left.

Maps

Maps shows you street maps, satellite photos, and street views of locations in many of the world's countries and regions—a wealth of information that students can use in their projects. For example, students can view the actual terrain of the Oregon Trail or the Egyptian pyramids. You can also get detailed traffic information as well as driving, public transit, and walking directions to specific locations.

Music

To access your audio collection, tap Music, then tap Playlists, Artists, Songs, or Albums. Tap More to browse Audiobooks, Compilations, Composers, Genres, or Podcasts. Tap a title to play it.

Reminders

With Reminders, you and your students can note to-do items in a list or by date. You can set up a date to be reminded about each item and also assign it a priority level. Check off each item as it's completed. This is a great way for students to keep track of homework and other class assignments.

Newsstand

Newsstand puts all your newspaper, magazine, and journal subscriptions from the App Store in one place, ready for you to read. To get started, tap the Newsstand icon and then tap Store to go to the section of the App Store that features newspapers, magazines, and journals. Tap to add the items you want.

Photo Booth (iPad)

With Photo Booth, you and your students can take photos of each other and then add fun effects to them. Photo Booth takes photos with the front-facing camera, so you just need to hold up the iPad and tap the camera icon at the bottom of the screen to take a picture. You can use the photo as is or choose an effect. The photos are saved to the Photos library on iPad. You can email them to others or add them to projects created with iWork apps for iPad or iMovie for iPad.

Calculator (iPod touch)

Tap the onscreen buttons in Calculator to enter figures and perform calculations. It's easy for students to keep track of their calculations—when you tap the add, subtract, multiply, or divide button, a white ring appears around that button to indicate which operation is selected. When you rotate the iPod touch, the calculator changes to a fully functional scientific calculator. (Calculator is included with iPod touch; for iPad, there are many downloadable calculator apps.)

Clock (iPod touch)

You and your students can use the Clock app to see what time it is in other parts of the world, set repeating or one-time alarms, and use a stopwatch and timer. In the Clock app, tap World Clock, Alarm, Stopwatch, or Timer to use that feature. A variety of clock and timekeeping apps are available for download from the App Store for iPad.

Voice Memos (iPod touch)

Use Voice Memos to record all sorts of audio files on iPod touch. You can sync the files to your iTunes library or share them via email. To record, tap Voice Memos from the Home screen, then tap the red Record button to start recording. Tap this button again to pause the recording; tap the stop button (black square) to stop recording. To hear your recording, put on earphones and tap the "Go to voice memos" button (with the horizontal lines). See "Using iPod touch and iPad for Voice Recording" later in this guide to learn more about Voice Memos.

You can download a voice recording app for iPad from the App Store.

Adding Apps from the App Store

Thousands of education apps are available on the App Store, offering unlimited potential to transform teaching and learning. There are apps for every subject and every stage of learning. Some apps can be used on all iOS devices, and some are specifically for iPad. To view an app for iPhone or iPod touch in a larger size on iPad, just tap 2x at the bottom right of the iPad screen.

A few examples of apps available for download:

- ShowMe Interactive Whiteboard from Learnbat, Inc. (iPad)—Record voiceover whiteboard tutorials and share them online.

- Britannica Kids: Ancient Egypt from Encyclopedia Britannica (iPad and iPod touch)—Learn about Egypt with videos, images, and interactive maps and games. (Volcanoes and Dinosaurs are other apps in this series.) For ages 8–12.

- Frog Dissection from Emantras Inc. (iPad)—Dissect a frog with this scientifically accurate and easy-to-use app.

- Starfall ABCs from Starfall Education, LLC (iPad and iPod touch)—See, hear, and interact with letters and sounds in words, sentences, and games. For younger students, including English language learners.

- Math Bingo from ABCya.com, LLC (iPad and iPod touch)—Practice addition, subtraction, multiplication, and division skills in this lively game with three levels of difficulty.

- Motion Math Zoom from Motion Math (iPad and iPod touch)—Practice learning place values using a zoomable, stretchable number line and engaging objects such as dinosaurs and amoebas; start with basic numbers and go all the way up to negative numbers and decimals.

- eClicker Presenter and eClicker Audience from Big Nerd Ranch, Inc. (iPad and iPod touch)—Use this polling software to pose questions to the class with eClicker Presenter; students answer with eClicker Audience on their iOS devices.

- WolframAlpha from Wolfram Alpha LLC (iPad and iPod touch)—Get instant answers to all sorts of questions on any topic from this comprehensive reference app.

- Algebra Touch from Regular Berry Software, LLC (iPad and iPod touch)—Review algebra with this app that takes advantage of the Multi-Touch capabilities of iOS; app includes lessons and practice problems presented by the app or created by the user.

- The Elements: A Visual Exploration (iPad) and The Elements for iPhone 4 (for iPod touch) from Element Collection—Explore the periodic table with this visual interactive app that has 360-degree views of elements and related objects and a wealth of engaging information. The iPad version is viewable in 3D with 3D glasses.

- GeoBee Challenge by National Geographic (iPad and iPod touch)—Have fun testing your knowledge of world geography; includes beautiful maps from *National Geographic*.

- iHomework from Paul Pilone (iPad and iPod touch)—Students can track assignments, store class and teacher information, calculate course grades, and set reminders for themselves with this organization aid.

- Proloquo2Go from AssistiveWare (iPad and iPod touch)—Get an augmentative and alternative communication (AAC) system for students who have difficulty speaking.

To view a list of additional recommended apps for education, visit the Apps for Learning collections at www.apple.com/education/apps.

You can locate and download apps from the App Store in iTunes on your computer or download them directly to your device when connected to the Internet via a wireless network. You can search for apps by category or name. If you download apps from iTunes on a computer and you're using iCloud, the apps automatically appear on the iPad or iPod touch. If you're not using iCloud, connect the iOS device to the computer to sync the apps from iTunes. (See "Adding Content to an iOS Device" later in this guide.)

You need an iTunes Store account to download apps from the App Store, including free items. You can set up this account by clicking Account in the iTunes window. You don't need to enter credit card information to open an account. (For more information, go to support.apple.com/kb/HT2534.) Once an app has been synced or installed directly, tap its icon to open it.

Educational institutions can purchase multiple copies of apps at the same time by using the App Store Volume Purchase Program. For more information about this program, go to volume.itunes.apple.com/us/store.

You can easily organize apps into folders on iPad and iPod touch. For example, you could have a folder of math apps and another folder of language arts apps. To create a folder, touch and hold an app until it wiggles and then drag it onto another app. Repeat this step to put other apps in the same folder. The device automatically names the folder based on the category of apps in it, but you can rename it. To do this, touch and hold the folder until it wiggles, tap the folder icon, tap the name field, enter a new name, and then tap Done.

To access apps in a folder, just tap the folder and then tap one of the apps in it. To remove an app from a folder, touch and hold the folder until it wiggles, tap the folder, then drag the app with an "x" out of the folder area at the bottom of the screen. You can also create app folders in iTunes when your device is connected to your computer.

Finding and Using Additional Education Content

iOS devices, the iTunes U app, and iTunes provide a great way for you and your students to access valuable education resources. This includes content from existing sources, such as apps, textbooks, and other books from the iBookstore, iTunes U content and courses, podcasts, audiobooks, music, and videos, as well as content you create yourselves, such as podcasts, movies, photos, slide presentations, and books for iPad created with iBooks Author.

This section describes different types of education content and apps available for use with iOS devices. The next section describes how you and your students can use the tools that come with a Mac and iPad and iPod touch to produce your own content to use with these devices.

Finding Content on iTunes U

One great resource from the iTunes Store is iTunes U, the world's largest online catalog of free education content. iTunes U has more than 500,000 pieces of content—including complete courses, lectures, lab demonstrations, language lessons, movies, panel discussions, and more. iTunes U content comes from hundreds of colleges, universities, and elementary and high schools around the world; state departments of education; and other education content providers. It includes content for both K–12 and higher education audiences. For example, you can view and listen to speeches, interviews, technology tutorials, science movies, news reports, art lessons, and professional development resources of interest to a broad range of audiences.

The Beyond Campus section of iTunes U includes professionally created content from cultural institutions such as PBS, NPR, and American Public Media, as well as from museums such as the Smithsonian, The New York Public Library, the Brooklyn Museum, and many more.

iTunes U content for use by K–12 teachers and students includes:

• Khan Academy—an ever-growing library of videos on biology, algebra, calculus, chemistry, and many more topics.

• KQED (a PBS affiliate)—a variety of videos and other materials for use in the classroom; topics include Digital Storytelling and The Physics of Baseball.

• Study Partner from the Tennessee Department of Education—math skills audio presentations for students in second through eighth grade.

• Library of Congress—a variety of films, audio, and education materials, including primary source historical videos such as *Early Films: Edison Companies* and *America at Work, America at Leisure*.

See "Enhancing Productivity for Educators" later in this guide for more iTunes U resources for professional development.

Students can easily access all of these resources from one place with the iTunes U app on iPad or iPod touch. They can browse and download content from the entire iTunes U collection as well as classroom course materials produced with iTunes U Course Manager.

Using and Producing Courses with iTunes U Course Manager

Educators can create full courses and publish them on iTunes U using iTunes U Course Manager, a web-based tool accessible from a web browser. Students then have access to all course materials through the iTunes U app on iPad or iPod touch. Courses can feature audio, video, books, apps, websites, and other content. Students can review these materials at any time, from just one location. And they can keep track of the class assignments and check them off when they're complete.

If your K–12 school district is an iTunes U provider, you can create your own courses and then distribute them to your students and anyone else via iTunes U.

Locating Content

You can search for and use iTunes U content with the iTunes U app on iPad or iPod touch or with iTunes on a computer. The iTunes U app is free from the App Store.

To locate and download resources in iTunes U on iPad or iPod touch:

1. If you don't already have the iTunes U app, download it from the App Store.

2. From the Home screen, tap iTunes U. (If the Library is displayed, tap Catalog at the upper right.)

3. From this screen, you can browse featured content, see the most popular downloads in specific categories, or browse additional content by category or provider. To look for a specific item, tap Search and type a word in the Search field at the top of the screen, then tap Search on the keyboard.

4. Tap an item once to preview it.

5. To download content, tap the item, tap the Free button, and then tap to download.

To locate and download resources in iTunes U on a computer:

1. Open iTunes, then click iTunes Store (below Store in the sidebar).

2. Click iTunes U at the top of the iTunes Store window to go to the main iTunes U page. (If you don't see iTunes U, enlarge the window by dragging the resize control in the bottom-right corner of the window.) Press and hold iTunes U in the navigation bar to view categories of content, or click an option in iTunes U Quick Links, Top Charts, or "More on iTunes U." To learn more about iTunes U, click "An Introduction to iTunes U" under Learn More.

3. To search for iTunes U content, enter text in the search field. The iTunes Store divides the results into categories. To see only iTunes U search results, click iTunes U under Filter By Media Type on the left. Items from the search are divided into four categories: Collections, Episodes, Courses, and Materials.

4. Click an item in the iTunes U Materials or iTunes U Episodes list to play it. Click the title of a course or collection to view more information about it and to see a list of available audio and video tracks. Double-click an item in the list to play it.

5. To download items you want, click Free or Subscribe Free. If the content is ongoing, you can subscribe to automatically download future tracks. Often, transcripts of the audio are also available.

Once downloaded, you can connect an iPad or iPod touch to your computer to sync the new files to the device.

See "Resources" later in this guide for more information about iTunes U. To sign up to be an iTunes U provider, go to eduapp.apple.com.

Reading Books on iPad and iPod touch

iPad and iPod touch provide an engaging way for students to read books, whether they're books from the iBookstore—such as textbooks for use on iPad—books created on the Mac with iBooks Author, or interactive books from the App Store.

Use the iBooks app, a free download from the App Store, to read books on iPad or iPod touch. After you've downloaded the app, tap the iBooks icon and a bookshelf appears. Tap Store to download a book from the iBookstore.

A special section of the iBookstore includes compelling new Multi-Touch iBooks textbooks created by publishers for use specifically on iPad, such as E.O. Wilson's *Life on Earth* and *Algebra 1* from McGraw-Hill. These books include many features to provide an in-depth learning experience. Photos can be organized in a photo gallery that students swipe through to view. Individual photos can have callouts and tap-and-zoom features that allow students to zoom in for more detail. These textbooks may also include 3D images that readers can view from all angles, web-linked information that's always up to date, and animated presentations, videos, and audio materials. Chapter reviews and study cards give students an opportunity to test their knowledge.
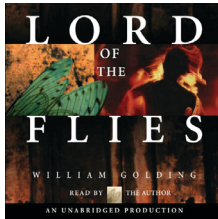
Students can also use the iBooks app to read books created on the Mac with iBooks Author—books you've created for your class, books by others that have been published on the iBookstore, or books that students create themselves. (See "Producing Multi-Touch Books with iBooks Author" later in this guide.)

Students just tap to open a book on their iBooks bookshelf and swipe to turn the pages. iBooks makes it easy for students to customize their reading experience. They can access dictionary definitions, adjust the font size, zoom in on a page, search for words, highlight text, and add notes. They can also use VoiceOver to hear the text read back to them. (See "Accessibility and iOS Devices" later in this guide for information on settings that allow VoiceOver to be turned on and off with a triple-click of the Home button.)

In addition to textbooks, thousands of other books are available for download from the iBookstore, many of which are free. The following are just a few of the free books available: *The Odyssey*, Thomas Paine's *Common Sense*, *Frankenstein*, and *The Federalist Papers*. Students can also read and explore books on iPad and iPod touch with interactive book apps, such as Milly, Molly and the Bike Ride; Miss Spider's Tea Party; Shakespeare in Bits: Romeo and Juliet; Bobo Explores Light; and Green Eggs and Ham.

Locating and Listening to Audiobooks

Many students benefit from listening to audiobooks on iPad and iPod touch. A large selection of audiobooks is available for purchase from the Books section of the iTunes Store. In addition, iTunes U includes hundreds of public domain audiobooks recorded and distributed by the University of South Florida. If you already have audiobooks on CD in your classroom or school library, you can import those books into iTunes and then sync them to iPad or iPod touch.

To locate audiobooks available from the iTunes Store, click iTunes Store in the sidebar in iTunes. Click Books in the top menu bar in the main iTunes Store window. The available audiobooks, such as *Lord of the Flies*, *Macbeth*, and *The Great Gatsby*, are organized by category. You can also locate audiobooks by entering a title or author in the search field at the top right of the iTunes window, and then pressing Return or Enter.

To view the large collection of audiobooks in the Lit2Go collection offered by the University of South Florida, go to itunes.apple.com/WebObjects/DZR.woa/wa/viewTagged?tag=Lit2Go&id=384490576.

Students can easily move around audiobooks on iPad or iPod touch. If an audiobook has chapters, tap Previous/Rewind to restart the current chapter. Tap Previous/Rewind twice to move to the previous chapter and tap Next-Fast-forward to move to the next chapter. When you end a session and return to the book later, the device starts the book where you last stopped listening.

You can set audiobooks to play faster or slower. To set an audiobook's play speed, open iPad or iPod touch Settings, choose Music > Audiobook Speed, then choose Slower, Normal, or Faster.

Subscribing to Podcasts

In addition to the resources on iTunes U, a wide range of other educational content is available as podcasts. With podcasts, you and your students can subscribe to free audio or video content available on the Internet. Once you subscribe to a podcast, each new episode gets downloaded to the computer automatically and then can be synced to the iOS device.

The iTunes Store is one of the best sources for education-related podcasts, with a section for education. You'll find shows produced by students, professional development materials from other educators, podcasts designed to help with learning a new language, and podcasts from museums. You and your students can also create and post podcasts to the iTunes Store. (See "Producing Podcasts" later in this guide.)

To access your library of podcast subscriptions, tap Podcasts in the top menu bar of the main iTunes window.

Locating Movies, Music, Speeches, and Other Media

Along with podcasts and audiobooks, you can also use other types of content with iPad, iPod touch, and iTunes. You can browse the iTunes Store to locate a variety of other media to enhance your curriculum, such as documentary movies, television shows, famous speeches, and children's music.

Creating Your Own Content

In addition to content available in iTunes and iTunes U, you and your students can create content to share on iPad or iPod touch. You can produce content for iPad and iPod touch on a Mac or with apps on the iOS devices.

Creating Content on an iOS Device

There are so many possibilities for creating content on iPad and iPod touch—photos and movies with Camera; musical compositions with the GarageBand app; presentations, spreadsheets, and documents with the Keynote, Numbers, and Pages apps; and recorded audio files. This section discusses just a few of the options.

Making Movies with iPad and iPod touch

Students can film and edit movies on the go with the built-in HD video camera on iPad and iPod touch. For example, they could interview family members or subject experts in the community, or take footage on a class field trip. After they shoot video, students can use the built-in editing tools to choose which footage to keep.

Students can make beautiful movies anywhere with iMovie, the moviemaking app that puts everything they need to tell their stories right at their fingertips. They can add a theme, music, photos, titles, narration, and transitions to their movies as well as combine and edit clips. On iPad, they can also fine-tune their edits with the Precision Editor. And there are so many ways to share their completed projects without ever leaving the iMovie app: via YouTube, Vimeo, or CNN iReport; email; transferring them to a computer and compatible iOS devices; or showing them to the class on a TV or a projector. (For more information, see "Accessories for iPad and iPod touch" later in this guide.)

If students produce their movie projects on the Mac, they can take video and photos on iPad or iPod touch and then import the clips and photos to use with iMovie on the Mac.

Making Music with GarageBand

With the GarageBand app, students can use Multi-Touch gestures to experience the excitement of creating music. They can choose from a wide range of Touch Instruments, such as a grand piano, electric organ, or acoustic guitar, plug in their own instruments, and use the built-in Guitar amp and effects. Even students with no musical experience can tap melodies on a piano, strum chords on a guitar, and more using Smart Instruments. Up to four students can even play and record together in jam sessions using their iOS devices with a Wi-Fi or Bluetooth connection. Their recorded tracks appear on the bandleader's device, ready for mixing and sharing.

Students can arrange and mix songs using a complete eight-track recording studio and more than 250 loops. When a composition is done, it can be exported to an iTunes library or sent to others via email. GarageBand on iPad and iPod touch is also compatible with GarageBand on the Mac, so students can work on the same musical piece on both the computer and an iOS device.

Taking and Editing Photos

You and your students can use Camera on iPad or iPod touch to take photos and then view, organize, edit, and share them using the iPhoto app, available for download from the App Store. For example, students can take photos to illustrate vocabulary words for a classroom book, document science experiments and add the pictures to their lab reports, or edit photos they took from a field trip to share in a slideshow or photo journal.

The iPhoto app includes a scrollable thumbnail grid that makes it simple to quickly locate photos, compare them side by side, and then select the ones you want to use. You can then edit the pictures, such as by cropping or adjusting the contrast, or add professional effects like Black & White or Vintage. Then you can make finishing touches with brushes—for example, to lighten or darken part of a picture, sharpen an area, or eliminate red-eye.

There are many ways to share photo collections. You can showcase your photos in a photo journal complete with captions, maps, dates, and the weather—share the journals on iPad or iPod touch, or use iCloud to share them with others. Photos can also be viewed in class by using AirPlay and Apple TV or transferred to a computer to use in projects produced on the Mac.

Using iPod touch and iPad for Voice Recording

Recording memos, lectures, interviews, small group discussions, and more is easy on iPod touch (with the built-in Voice Memos app) and iPad (with the addition of a third-party recording app). Capture reading samples for assessment purposes or for students to use for self-reflection. Students learning a foreign language can record themselves to practice speaking and fluency. Dictate instructions for science labs, lesson plans, and research notes, or record to-do lists as you think of them. Record staff or parent meetings instead of transcribing them. You can share the recording by posting the audio file on a website.

With both iPod touch and iPad, you can record with the built-in microphone, attach an external microphone, or use the microphone on Apple Earphones. Use the iPod touch built-in speaker to review your recorded audio files later, or use headphones with either iOS device. When you connect your iPod touch to your Mac, audio recordings made with the Voice Memos app are copied to iTunes and stored in a Voice Memos playlist. You can also share files by email from the device. Create iTunes playlists to store each student's recordings in a digital portfolio. Recorded audio files can be reviewed in iTunes, edited in GarageBand on a Mac, and used in other projects, such as podcast narration or courses produced with iTunes U Course Manager.

Creating and Sharing Presentations, Documents, and Spreadsheets

It's easy to produce a wide array of presentations, spreadsheets, and documents using the iWork apps Keynote, Numbers, and Pages on iPad and iPod touch. These have been designed to take advantage of iOS Multi-Touch features and can be downloaded as individual apps from the App Store.

You and your students can create stunning presentations with the Keynote app on iPad or iPod touch. A great feature of iOS devices is the ease with which you can share and view presentations that you and your students produce. Students could present their findings from a lab experiment, produce flash cards for review, or demonstrate what they've learned about a period in history. You can use presentations to introduce a unit of study, share classroom events with students' families, or add to a Multi-Touch book created with iBooks Author.

In Keynote, students can choose from a collection of Apple-designed themes and then create slides with text, charts, tables, photos, their own artwork, and movies. They can add animation effects and transitions to enhance their presentations.

Numbers provides a flexible canvas to create spreadsheets that also include tables, charts, text, images, and even videos.
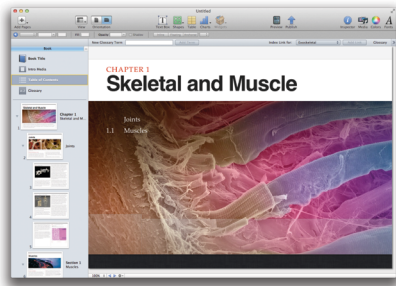
And with Pages, you can write all sorts of documents, such as reports, essays, and newsletters, right on your iOS device. You can add photos from the Photos app, correct spelling and look up words in a dictionary without leaving Pages, and format your documents with a tap.

These apps include many options for sharing files. You can send and receive files via email, copy files to and from any standard WebDAV server, and transfer files between your iPad or iPod touch and computer through iTunes. Connecting the iPad or iPod touch to a presentation device—such as a projector or television monitor—makes presentations and other files produced with these apps incredibly portable. For more information, see "Accessories for iPad and iPod touch" later in this guide.

With Keynote, Numbers, and Pages, you can also open and revise presentations, documents, and spreadsheets on iPad or iPod touch that were created with iWork or Microsoft Office applications on a Mac. Open and edit Pages and Word documents in Pages on your iOS device, PowerPoint and Keynote presentations in the Keynote app, and Excel and Numbers spreadsheets in the Numbers app. Or you can use iWork on a Mac to edit files created on your iOS device.

Creating Content on a Mac for Use on an iOS Devices

You and your students can also use classroom Mac computers to create a variety of education content for use on iOS devices. Produce Multi-Touch books using iBooks Author on the Mac and view them on iPad. Create multimedia projects, such as video or audio podcasts, using the iLife suite of applications. And you can use the applications in Apple's iWork productivity suite to produce narrated presentations or interactive documents.

Producing Multi-Touch Books with iBooks Author

It's easy to create and publish great Multi-Touch books for iPad using iBooks Author, a free app available from the Mac App Store on the Mac. There are so many possibilities—you might want to create a book with background information for a unit, test review materials, lab instructions, or a class collection of short stories, artwork, and movies. Students could use iBooks Author to share a journal about a piece of literature or to present all of their lab reports with images, graphs, and movies of their findings.

To get started with iBooks Author, choose from a collection of Apple-designed templates, each of which comes with a number of page layouts, including a table of contents and a glossary. You can then customize any of the templates.

Add text by typing or by dragging a word-processing document to the book—iBooks Author automatically flows the text into the pages of the book and retains any formatting and styles from the document.

Books come to life with interactive objects that are added with widgets. For example, you can add a photo gallery to a page—a sequence of images that readers can swipe through, each with its own caption. Add review questions—either multiple choice or drag-to-target questions—to gauge understanding. You can also use widgets to add movie or audio files, Keynote presentations, interactive images (complete with labels, panning, and zooming), 3D images, and web-linked data.

In addition to Multi-Touch widgets, you can add other images and digital files, tables, charts, and shapes. Create a glossary of terms along with images and related terms.

Share your finished book on iPad in the iBooks format. Or you can print it, email it, or export it as a PDF or text-only file. You can also submit your finished book to the iBookstore.

To learn more about iBooks Author, visit www.apple.com/ibooks-author.

Producing Digital Content with iLife

iLife on the Mac is a suite of digital content creation applications that enables teachers to design more engaging lessons and students to create even more dynamic, media-rich projects. And with iPad and iPod touch, students have an exciting tool with which they can share those projects. The iLife suite is installed on every new Mac and includes the following applications:

- **iMovie '11.** Create digital movies and podcasts with iMovie and export them to iPad or iPod touch for viewing, or include them in books created with iBooks Author. (See "Creating Video Podcasts with iMovie" later in this guide.)

- **iPhoto '11.** Import, organize, edit, and share photos and use them in iMovie projects, Keynote slide presentations, podcasts created in GarageBand, and books produced with iBooks Author. Students can also use iPhoto to create photo books on any topic. Sync your photo creations to iPad and iPod touch as well as photo albums in iPhoto. Or sync photos and movies taken on iPad and iPod touch to the iPhoto library on your Mac.

- **GarageBand '11.** Create and record music and podcasts, and then export them to iTunes and sync them to iPad and iPod touch. (See "Creating Podcasts with GarageBand," later in this guide.)

All the iLife applications are simple to use and work seamlessly with one another with the included Media Browser. For example, you can add photos in iPhoto and music files in iTunes with one click and then easily sync them to iPad or iPod touch.

Producing Podcasts

Creating a podcast is an excellent and easy way for you to create content for students to use on iPad or iPod touch and share what they've learned with an audience.

You could create podcasts with test review information, science lab instructions, or language exercises. Students can then view these materials at their own pace and review them as needed. Or students could create a weekly podcast recap of what they've studied for the week. Distributing it to parents and the general public is a great way to showcase the quality work occurring in your classroom or school. Student podcasts of poetry readings or book reports can provide motivation for classroom writing. Student summaries of science projects or reports on school sporting events are other fun podcast ideas.

Podcasts that combine sound and images are easy to make with GarageBand on a Mac. And with iMovie on a Mac or iOS device, you can create video podcasts with video footage, photos and other images, narration, music, sound effects, and more.

Podcast Examples

Before students begin creating podcasts, you may want to review or share with the class some examples of podcasts other students have created. Here's some inspiration:

- *Radio WillowWeb*: Willowdale Elementary School students in Omaha, Nebraska, have a lot to share about what they learn.
  www.itunes.com/podcast?id=73800253

- *A School in the Coulee*: Longfellow Middle School students in La Crosse, Wisconsin, produce this podcast on topics ranging from literary adaptations to Africa.
  www.itunes.com/podcast?id=79169064

• *Podcast Central*: This comprehensive collection of podcasts is produced by the students, teachers, and administration of Mabry Middle School in Marietta, Georgia. itunes.apple.com/WebObjects/MZStore.woa/wa/viewPodcast?id=73888013

Creating Podcasts with GarageBand

To create an audio podcast, you only need GarageBand, a computer with a built-in microphone, and your students' creativity. To get started, students open a new podcast file in GarageBand. They click simple controls to start, stop, and play back recording, then add sound effects, jingles (short music snippets designed for podcast use), and other music. GarageBand automatically adjusts the sound quality and volume levels. Students can also create an enhanced podcast by adding photos or other images from an iPhoto library or from Photos on iPad or iPod touch. They could even add hypertext links that send listeners to relevant websites.

Students can publish the podcast to the iTunes Store, post it online, or add it to a school website.

Creating Video Podcasts with iMovie

To create a video podcast or another movie project, open iMovie and create a new movie project, selecting an Apple-designed theme for the project if desired. Then add video clips that are already saved in an event in iMovie or import them from a camera, the computer's hard disk, or another source. Drag the video clips you want to include to the iMovie project area and then add sound effects, music, maps, photos, and other images. You can record voiceover narration using the computer's built-in microphone and add title slides and transitions. Add a green-screen effect to make it look like a person is talking in front of a different background, or add a solid color or animated background.

Producing Presentations with Keynote on the Mac

As discussed earlier in "Creating and Sharing Presentations, Documents, and Spreadsheets," you and your students can use the Keynote app to produce great-looking presentations on any topic. You can also use Keynote on the Mac to create new presentations or make changes to the slideshows created with Keynote on an iOS device. As with the Keynote app, you can choose a theme and then create slides that include text, charts, tables, images, movies, animation effects, and transitions. With Keynote on the Mac, you can also add voiceover narration to presentations and then share them on iPad or iPod touch.

Creating and Sharing ePub and PDF Documents

In addition to creating books for iPad with iBooks Author (see "Producing Multi-Touch Books with iBooks Author" earlier in this guide), you and your students have a powerful and easy way to publish content on iPad and iPod touch with ePub documents. First create a digital document in Pages on the Mac that can combine text with movies, audio, photos, tables, and other elements. Next, export the file in the ePub format. Now you can add it to iTunes and copy it to an iOS device. The ePub document shows up on the iBooks bookshelf for viewing on iPad and iPod touch just like any other book. Because the iBooks app uses the ePub format, the most popular open book format, you can add any files in that format to the bookshelf. Students can then read those publications using the features available with books downloaded from the iBookstore—they can add bookmarks, look up words in the dictionary, search for and copy text, highlight text, and so on.

Sending Text to iTunes

Another valuable feature on the Mac is a service called "Add to iTunes as a Spoken Track." With this feature, students can select text in any Apple application, such as a web page in Safari, PDF document in Preview, or report in Pages, and use the Services menu in that application to send the files to iTunes—the text becomes an audio file in a Spoken Text playlist in the iTunes library that they can then sync to their iOS device.

Adding Content to an iOS Device

You can add content to iPad or iPod touch directly on the device or add content using iTunes on a computer. When you use Apple's iCloud service, content that you've added to or changed on one device or computer appears automatically on your other devices or computers. You can also connect an iPad or iPod touch to a computer to sync the contents of the iTunes library, calendars, contacts, and more to the device.

Using an iOS Device to Add Content

You don't need a computer to add content to iPad or iPod touch. You can add content directly to the device in a number of ways:

- Use the App Store to locate and download apps.
- Use iTunes to find and download music, movies, TV shows, podcasts, and more.
- Use the iTunes U app to browse and download iTunes U courses and other items.
- Use iBooks to download books from the iBookstore.
- Use Newsstand to add magazines, newspaper, and journals.

See "Finding and Using Additional Education Content" earlier in this guide for more information.

Using iCloud to Access Content

By setting up iCloud on your devices and computers, any content downloaded to one of those devices or computers appears automatically on your other devices and computers. This content includes purchased music, email, photos, calendars, contacts, notes, and documents such as Pages, Keynote, and Numbers files. iCloud also automatically syncs any edits you make to your content, so if students work on a report in Pages on iPad, for example, their changes are waiting for them on a Mac when they pick their work back up later. With the Photo Stream feature, photos taken with an iPad or iPod touch on a field trip appear automatically on that user's computer or could be shown to the whole class with AirPlay and Apple TV.

For more information about setting up and using iCloud, visit www.apple.com/icloud.

Using iTunes on a Computer to Add Content

The first time you connect iPad or iPod touch to a computer, Setup Assistant appears and guides you to name the device and select sync settings. You can set iTunes to sync music, books, podcasts, iTunes U content, other audio files, movies and TV shows, apps downloaded from the App Store, photos, contacts, notes, calendars, email account settings, and web page bookmarks.

You can adjust sync settings whenever the device is connected to a computer. With the automatic syncing option, you can choose to sync all your content whenever the device is connected to the computer or have iTunes sync just some of it, such as particular playlists, apps, or photo albums. The manual syncing option lets you select the specific items you want to sync when the device is connected to the computer.

How you choose to set up syncing will vary depending on how you manage the iOS devices in the classroom. (See "Managing iOS Devices and iTunes for Student Use" earlier in this guide.) For example, if you sync a classroom set of iPad or iPod touch devices using an Apple iPad Learning Lab or Apple iPod Learning Lab, you may want to sync them automatically with selected content. Students who are assigned their own devices might want to manually select items to sync from a class computer. This section provides an overview of the syncing options in the settings panes in iTunes.

To set up iPad or iPod touch for syncing:

1. Connect the iPad or iPod touch to your computer and open iTunes (if it doesn't open automatically).

2. In iTunes, click the iPad or iPod touch icon under Devices in the left sidebar.

3. Click the Summary button if the Summary pane isn't already open.

4. Select syncing options in the Summary pane:

   • Select the option to have iTunes open automatically when the device is connected if you want iTunes to open and sync the device automatically whenever you connect it to the computer. Deselect this option if you want to sync only by clicking the Sync button in iTunes or if you want to manually manage content.

   • Select "Sync only checked songs and videos" if you want to sync only selected items in the computer's iTunes library.

- Select "Manually manage music and videos" to turn off automatic syncing in the Music and Video settings panes. If you select this option, you add items to the device by dragging them from the iTunes library. For more information about the Summary pane options, see the user guides for iPad and iPod touch, available at www.apple.com/support.

5. To sync music, movies, TV shows, podcasts, iTunes U items, and books and audio-books, click the Music, Movies, TV Shows, Podcasts, iTunes U, and Books buttons and select to sync all the titles in that category or just selected ones.

6. To sync the library's Photos, click the Photos buttons and select the options you want.

7. To select the sync setting for contacts, calendars, email accounts, notes, and web browser bookmarks, click the Info button and make the selections you want.

8. To specify App Store apps to install on iPad or iPod touch from your iTunes library, click the Apps button.

9. When you're finished, click Apply.

iTunes starts loading your device with the selected content. This can take several minutes if the iTunes library is large.

When the device no longer displays the "Sync in progress" message, you can safely disconnect it.

When you record audio or download items from the iTunes Store or App Store on your iPad or iPod touch, those items are synced from the device back to your iTunes library.

See "Resources" later in this guide for links to additional sources of information.

Accessibility and iOS Devices

In addition to being designed for ease of use and a great user experience, Apple's iOS devices come with built-in accessibility features and learning aids. iPad, iPod touch, and iTunes offer many features and apps that can help accommodate a range of students with special needs.

Vision

iPad and iPod touch have valuable built-in accessibility features—which are also available on the Mac—for visually impaired students:

- **White on Black:** Displays the screen as photonegative, with white text on a black background.
- **VoiceOver:** Gesture-based screen reading technology that uses speech to describe what's happening onscreen. It can also read aloud the contents of a page, such as a book in iBooks or a web page in Safari. When VoiceOver is on, it changes the gestures used to control the device so students who are visually impaired can navigate and use the device much like their sighted counterparts. VoiceOver supports over 30 different languages and can be used with over 30 different models of Bluetooth braille displays.
- **Zoom:** Magnifies images on the screen by up to 500% so elements are easier to see and read.

Set up Zoom, White on Black, and VoiceOver on iPad or iPod touch by going to Settings > General > Accessibility. You can also manage these settings in iTunes when the iOS device is connected to your computer. To use iTunes to manage these settings, click Configure Universal Access in the iTunes Summary pane.

If Zoom, VoiceOver, or White on Black is only used sometimes, you can turn on the Triple-click Home option in Accessibility settings. With this option, you press the Home button three times to turn that feature on and off.

Voice Control is another feature that visually impaired students can take advantage of on iPod touch (see "Physical and Motor Skills," on the next page).

Additionally, the Sleep/Wake and Volume buttons on iPad and iPod touch are located and designed in a way that visually impaired students can readily navigate.

Hearing

iPad and iPod touch include accessibility features for those who are deaf or hard of hearing. You can view closed caption content in iTunes and on iPad and iPod touch. You can also view content with subtitles in iTunes and on iPad.

To set up the device to display closed captions on the iPad or iPod touch, go to Settings > Video, and select On for Closed Captioning. Alternatively, you can turn on closed captioning from the iTunes Summary pane when the device is connected to the computer. Click Configure Universal Access, then select "Show closed captions when available."

It's easy to find closed caption movies and iTunes U content in the iTunes Store by using a Power Search. The CC logo appears in descriptions of captioned content.

Mono audio is a helpful feature for some students, especially those who have limited or no hearing in one ear. With it, you can route both right- and left-channel audio into both earbuds so the audio is heard in both. In Settings, go to General > Accessibility and then turn the switch for Mono Audio on or off. You can also set up mono audio in the iTunes Summary pane by clicking Configure Universal Access.

Third-party accessories such as hearing aid–compatible induction ear loops and wireless remote headsets are also available. (See "Accessories for iPad and iPod touch" later in this guide.)

Physical and Motor Skills

It's easy to operate the touchscreen of iPod touch and iPad as it requires very simple contact. You can also purchase a stylus to use for touching the screen. The Sleep/Wake and Volume buttons on each device are also designed for ease of use.

With Voice Control on iPod touch, students can use their voice to play music by the name of the artist, album, or playlist, and then pause, change tracks, and shuffle music. To use Voice Control on iPod touch, press and hold the Home button and then speak the item you want when prompted by an audio signal.

When using iTunes, students can also take advantage of the many keyboard and mouse accessibility options included on the Mac, which are set in System Preferences.

Apps for All Learning Styles

Following a few of the many apps available to aid students with diverse needs; each are available for both iPad and iPod touch:

iBooks from Apple Inc.
With the free download of the iBooks app, students can download and read books and customize the pages to best meet their needs. They can enlarge the font size, use zoom, and look up words in a dictionary from the page. And because iBooks takes advantage of the inherent accessibility of iOS, it works seamlessly with VoiceOver.

Dragon Dictation from Nuance Communications
The Dragon Dictation app transcribes words you record into text files. This is a great way for students who have a hard time with onscreen keyboards or keyboards in general to express themselves in written format. Once the text has been transcribed, you can edit and send it via email or add it to a blog or wiki site.

Proloquo2Go from AssistiveWare
The Proloquo2Go app is an augmentative and alternative communication (AAC) system for students who have difficulty communicating verbally. Students tap phrases or words that have associated illustrations to add to a message window. You then tap the message window to hear what the student wants to say. Messages can be saved to use again later. Students can customize the app with their own entries and use their own photos or other images.

Sign 4 Me from Vcom3D, Inc.
The Sign 4 Me app is primarily used for learning sign language and as a sign-language translator. A three-dimensional character signs the words that you enter, either once or in a loop. The library includes more than 11,000 words. You can move the character around the screen, zoom in and out, and change angles to see the signing from different views. The app saves words or phrases you've typed so it's easy to repeat them.

soundAMP R from Ginger Labs

SoundAMP R is an app for those who need to amplify the sound coming in externally on the iOS device. It amplifies the sound and you can use the Repeat button to hear what was just said again.

iSeeClearly from The Newport Avenue Group

This app helps readers discern small text. Using the built-in camera of the iPod touch, you can zoom in up to 10 times and freeze images to read them.

Pocket Artic

Developed by speech and language pathologists, the app provides a multisensory approach to articulation drills. It includes more than 2100 built-in flash cards tagged at both word and sentence level and comes with auditory feedback.

To view a more comprehensive list of apps, visit the Special Education collection on the iTunes Store for iPod and iPhone and for iPad.

Enhancing Learning with iOS Devices and iTunes

There's no shortage of ways you can use iPad, iPod touch, and iTunes to support teaching and learning. This chapter provides just a few ideas for their use in the classroom.

Increasing Language Skills

iPad and iPod touch can assist students of all grade levels as they gain vocabulary, grammar, spelling, and related language skills. Language learners can benefit from the devices' built-in features, such as spelling correction, as well as apps from the App Store and iTunes U and other iTunes Store resources. For example, elementary students can have fun learning to spell with customized quizzes created with the SpellBoard app, while high school students can gain vocabulary and grammar expertise for college entrance exams with apps such as Pearson GrammarPrep, Word Wit, or the Princeton Review SAT Vocab Challenge.

iTunes U offers many valuable resources, such as the Grammar Grater audio podcasts from Minnesota Public Radio and the Tennessee Department of Education Language Arts series for different grade levels. With downloads from the iTunes Store, students can hear fun songs that also teach spelling and grammar, like those on the *Clifford the Big Red Dog's Top 15 ABC & Spelling Songs* album.

For vocabulary practice, students can create customized flash cards using one of the flash-cards apps from the App Store or produce them on the computer and then review as needed on iPad or iPod touch.

Improving the Written Word

You can use iPad and iPod touch to support all steps of the writing process. Engaging visual mind-mapping apps like Popplet or MindNode are a great way for students to start their writing projects. They can diagram and plan their documents and then export their outlines to the computer. The Pages app makes it easy for students to create written assignments—they can pick from the beautifully designed templates, check spelling as they type, and look up word definitions directly from the page.

With apps such as StoryKit, students can create electronic storybooks that include text and illustrations drawn on the screen and sounds recorded with the device. Or they can produce their own animated cartoons with apps like Toontastic.

High school students have 24/7 access to essay assistance with apps like Essay Czar. And you can enhance your writing curriculum with resources from iTunes U, such as Writing Process from the Maine Department of Education, a collection of video resources for educators about the writing process.

And nothing adds excitement to the writing process like creating books on a Mac using iBooks Author or Pages for use on iPad or iPod touch. (See "Producing Multi-Touch Books with iBooks Author" and "Creating and Sharing ePub and PDF Documents" earlier in this guide for more information.)

Building Reading Fluency

iPad and iPod touch offer so many ways for students to read, hear, and record text to develop their reading fluency skills. The compelling new Multi-Touch textbooks for iPad engage students in the reading experience. And interactive apps like Milly, Molly and the Bike Ride let students read and hear the text of an engaging story (in multiple languages), and they can even record themselves reading it and play back what they've recorded.

Many students find it useful to listen to audiobooks, often following the written text onscreen or in the printed book at the same time. Even for fluent readers, listening to audiobooks can provide audio reinforcement of their reading skills. (See "Reading Books on iPad and iPod touch" earlier in this guide for more information.) In addition to downloading audiobooks, older students can produce books for use by younger students.

Students can record themselves as they practice reading fluency and save the recordings in an iTunes playlist as a digital portfolio to show progress throughout the school year. (See "Using iPod touch and iPad for Voice Recording" earlier in this guide.)

Students can also enhance their reading fluency by reading the text of an audio file while they listen to it. For example, if you or your students record a reading sample (or if the "Send to iTunes as a Spoken Text" service is used to convert written text to an audio file in iTunes, described in "Creating Content on a Mac for Use on an iOS Device" earlier in this guide), text can be added in iTunes. Students can tap the screen and view the text when they listen to the audio on their device. To do this, select the audio file in iTunes and then choose File > Get Info. Click Lyrics in the toolbar and either choose Edit > Paste to paste text you copied from a website or document, or type the text directly. Next, click Options in the information window toolbar, and then choose Music from the Media Kind pop-up menu. After the audio file is synced to the iPad or iPod touch, the student just taps the screen as the audio is playing to see the text.

Many resources are specifically designed to aid English language learners. For example, the Pocket English (ESL) app features extended dialogues along with lesson reviews, vocabulary lists, and other features to reinforce learning. Each of the three Pencil Bot ESL apps combines videos and interactive mini-games for different levels of English language learners. Other apps, such as Starfall ABCs, help young learners practice language and phonics skills. The iTunes Store offers other resources for ELL students and their teachers, such as podcasts designed for ESL students and the University of North Carolina's School of Education English as a Second Language (ESL) Workshop video, audio, and transcript files available in iTunes U.

Learning World Languages

Students who are studying a world language can download apps to practice, such as the Byki or uTalk apps for a variety of languages, or interactive books in another languages, such as Little Red Cap, a French version of Little Red Riding Hood. They can quickly look up words and hear them pronounced in different languages with a variety of translator apps. Using resources available on iTunes U and the iTunes Store, they can listen to audiobooks and other recordings (such as the news in Spanish), practice dialogues with iTunes U language courses, and watch videos to learn words and phrases. Students will enjoy using Word Lens—it allows you to instantly translate printed words from one language to another using the video camera. They can also record themselves using video or voice recording to practice the language and improve their fluency.

Increasing Reading Comprehension

Reading books with iBooks—whether they're Multi-Touch textbooks on iPad or literature books from the iBookstore—provides students with many ways to increase their reading skills and deepen their understanding of what they read. Younger students have immediate access to a dictionary to look up words as they occur in the book, and they can increase the font size. Older students can use the search and bookmark tools as they analyze and write about literature, such as searching for a recurring symbol or quotes by a specific character or marking passages they want to return to later.

Interactive book apps are another way to help students strengthen their reading skills and enhance their understanding. With the Green Eggs and Ham app, for example, students hear the book read aloud while viewing the text and can tap items onscreen to hear and see the word for that object. Elementary school students can work on their ability to read for details by using the MiniMod Reading for Details app. Older students can use the Shakespeare in Bits: Romeo and Juliet app to read, watch, and explore that play using built-in comprehension tools.

iPad and iPod touch offer additional tools to support reading—for example, students can take notes with the Notes app while they listen or pause to look up something on the Internet when they have a question.

When and Where in the World

You can support history and social studies with iPad, iPod touch, and iTunes. The versatile resources in iTunes U give students an opportunity to experience different periods of history or other locales. Students studying American history can view films of the Spanish-American War (actually made between 1898 and 1901) or the streets of Chicago in 1897 from the Library of Congress in iTunes U, or listen to Richard Nixon's Presidential tape recordings available from America Public Media. They can create an interactive journal in Pages on a Mac that includes the primary source videos, audio, and images and publish it as an ePub document to share with other students and family members, or use iBooks Author to create a book for iPad.

They can enrich their learning with interactive game apps such as National Geographic's GeoBee Challenge, The Oregon Trail, or Pearson's World History; travel through history with Virtual History ROMA and Back in Time (both for iPad); or find information with apps such as History:Maps of World and World Atlas HD from National Geographic.

Mobile Math

No matter what their level, students will enjoy math learning with iPad and iPod touch. These are versatile tools to support the learning of mathematics, personalize student learning, and extend learning beyond the classroom. Students can present and analyze data in spreadsheets with the Numbers app on iPad. They can also perform calculations and check their work with the Calculator app in iPod touch or with graphing and other calculators and conversion tools available for iPad and iPod touch.

They can reinforce their math skills with hundreds of engaging, interactive apps available from the App Store. Math apps provide you with an easy way to customize learning for particular students—you can include specific apps on a student's iOS device to support that student's learning needs. Elementary school students can practice math skills with the Math Bingo app, solve problems on a digital chalkboard with MathBoard, and practice fractions with Motion Math HD. Older students can deepen their understanding of algebra with Algebra Touch or challenge their critical thinking skills with NineGaps, a Sudoku-like game for building math skills.

iTunes U also offers many math-related resources, allowing students to learn math in different ways. Some examples are videos about algebra and geometry from the Paradise Valley Unified School District using the Arizona State Department of Education IDEAL eLearning Platform and materials about area and perimeter (and much more) from the Tennessee Department of Education Study Partner-Math program.

A Deeper Look at Science

iOS devices can enrich science teaching and learning at all grade levels with their highly interactive and engaging interface and rich collection of science tools and resources. Students can conduct scientific explorations using digital science tools such as PASCO Probeware or the ProScope Mobile digital microscope used with apps on iPad and iPod touch. With such investigations, students use real scientific tools and can quickly collect large amounts of real-time data that they can later use in their projects.

A broad array of valuable science resources is available for use with iPad and iPod touch, such as The Elements, a visual exploration of elements in the periodic table; Solar Walk, a 3D exploration of space; Reaction101; Frog Dissection for iPad; SimplePhysics; and the many science textbooks available for iPad. You can browse the Science category of iTunes U to find content for scientific study, from examples of bird songs to video talks on physics and soil composition and whole courses on biology.

For lab classes, you can create podcasts with lab experiment instructions that can include narration, text, video, and photos for students to access at any time on a mobile device. Students can then record findings with the Notes or Pages app, time data collection with the LabTimer app, record their results with voice recordings, take photos and videos of their explorations with the iPad or iPod touch camera, and compare their results with images from similar experiments on the Internet.

Exploring Art and Music

iPad and iPod touch are amazing resources for learning about and making art and music. Students can create art on iPad and iPod touch with just their fingers using exciting painting and drawing apps such as Doodle Buddy, Brushes, and SketchBook Mobile. Add effects and edit photos with apps such as TiltShift Generator (for creating retro miniature pictures from photos), Camera Bag, and Adobe Photoshop. View art collections around the world via apps such as Love Art: National Gallery of London, Musée du Louvre, and Art Authority, a collection of works by major Western artists throughout history, and download walkthroughs and talks on iTunes U from institutions like the Asian Art Museum, Museum of Modern Art, and London's Victoria and Albert Museum.

With the GarageBand app, students can play a wide variety of musical instruments. They can also create music using apps such as Band, Instruments!, Pianist Pro, Violin Player, and Shiny Drum, all of which can be used with iPod touch as well as iPad. You can record vocal performances with GarageBand or on iPod touch with Voice Memos, or capture video of performances with the built-in camera on iPad or iPad touch and then edit it with the iMovie app. Apps such as Karajan Beginner and resources from iTunes U are available for teaching music theory. And with resources from iTunes U, students can learn how to compose and explore different types of music, from Chicago blues to Indian ragas.

Enhancing Productivity for Educators

iPad, iPod touch, and iTunes provide educators with versatile tools for the school day and beyond. Administrators and teachers, including resource specialists, can use voice recording on iPod touch to record observations during classroom walkthroughs, and then email those files to teachers. You can record voice memos about students and email them to their families.

The apps on your iOS device make it easy to stay in touch using the Mail app, take notes at any time and then email them to others with Notes, make to-do lists with Reminders, read articles with Newsstand, keep track of your schedule with the Calendar app, and create presentations and movies to show the class.

The iBooks Author application on a Mac is an invaluable productivity tool for creating classroom materials for students to access on their iPad. To learn more, see "Producing Multi-Touch Books with iBooks Author" earlier in this guide.

If your K–12 school district is an iTunes U provider, you can use iTunes U Course Manager to put together all of your course materials for students to access using the iTunes U app on their iOS device. Courses can include audio, video, presentations, documents, PDF documents, iBooks textbooks, ePub books, iOS apps, and web links. The free iTunes U app gives students access to all your course materials in a single place. See "Resources" later in this guide for more information about iTunes U. To sign up to be an iTunes U provider, go to eduapp.apple.com.

You can also download a large variety of apps to support your teaching. Examples include:

- Apps to access your school's student information system, such as PowerTeacher Mobile (for iPad) or Mobile-SIS for use with PowerSchool, and StudentRadar for use with RadarServer

- Interactive polling apps such as ResponseWare and eClicker, which allow students to respond to a presenter's questions using their iOS device

- Apps to track student attendance, assignments, and more, such as Schedule Tracker and TeacherPal

- Assessment tools, such as GradePad and Tango RX

There's never enough time in the day for educators, but iPad and iPod touch can even help you fit professional development into your packed schedule. With the mobility of iOS devices, you can review and reuse development materials when and where it's most convenient. Download professional development content to your iPad or iPod touch and listen while you're at the gym, driving to and from work, or doing chores at home. View videos of new directives and techniques without waiting for the next face-to-face training session. And you can pause listening to take notes, email an idea to a colleague, or look up additional information on the Internet—all on your iOS device.

Podcasting allows administrators to update parents or faculty—even an entire district—in minutes. With just a few clicks, professional development content can be delivered automatically. It's the perfect way to expand ongoing training programs without straining district resources (see "Producing Podcasts" earlier in this guide).

Many types of professional development content are available for iPad and iPod touch. An abundance of free education resources are available, including a wide variety of lectures, discussions, and other materials from iTunes U as well as podcasts from the iTunes Store and other sites. Commercial materials, such as books, are also available from the iTunes Store and iBookstore. You can sync all of this PD content to iPad and iPod touch for convenient learning on the go. Here are just a few of many professional development resources available free from iTunes U:

- Teacher Development—Edutopia
  deimos3.apple.com/WebObjects/Core.woa/Browse/edutopia.
  org.1648918858.01648918860

- Center for Teaching and Learning—Stanford University
  itunes.apple.com/itunes-u/center-for-teaching-learning/id385634612

- University of South Florida—Professional Development Resources
  deimos3.apple.com/WebObjects/Core.woa/Browse/usf.edu.1273012993.01273013001

- Master Teacher Series—City University of New York Baruch College
  itunes.apple.com/us/itunes-u/master-teacher-series/id432107037

Resources

Apple Websites

Apple has extensive resources to learn more about iPad, iPod touch, and iTunes. At these sites, you'll find tutorials, lesson plans, and much more.

Learning with iPad
- Information about iPad features, iTunes U, apps, and more
  www.apple.com/education/ipad

- Guided tours and many other resources about how iPad is being used in education
  education.apple.com/ipad-learning

General Resources for Teachers and Administrators
- Apple in Education—includes getting started guides, guidelines, tutorials, and more
  www.apple.com/education/resources

Learning with iPod touch and iPhone
- Information about iPod touch and iPhone features, iTunes U, apps, and more
  www.apple.com/education/ipodtouch-iphone

Apps for Learning
- Information about apps for mobile learning, organized by subject and function
  www.apple.com/education/apps

App Collections on the App Store
- Back to School for iPad
- iPad Education Apps
- iPhone and iPod touch Education Apps
- Language, Grammar, and Vocabulary Apps
- iPod touch and iPhone Special Education Apps
- iPad Special Education Apps
- iPod touch and iPhone Life Science Apps
- iPad Life Science Apps

iTunes
- What is iTunes?
  www.apple.com/itunes/what-is

- iOS: Syncing with iTunes
  support.apple.com/kb/HT1386

iPad
- Videos and other information about iPad features
  www.apple.com/ipad

- iPad Support, including iPad User Guide
  www.apple.com/support/ipad

iPod touch
- Information about iPod touch features
  www.apple.com/ipodtouch

- iPod touch Support, including iPod touch User Guide
  www.apple.com/support/ipodtouch

iTunes Tutorials
- iTunes video and text tutorials
  www.apple.com/itunes/how-to

- iTunes 101 tutorial
  www.apple.com/support/ipod101/tunes

iTunes U
- Video about how to access iTunes U on iPhone or iPod touch
  www.apple.com/education/itunes_u

- iTunes U and iTunes U app overview
  www.apple.com/apps/itunes-u/index.html

- iTunes U Collections
  itunes.apple.com/WebObjects/MZStore.woa/wa/viewRoom?fcId=395458516&ign-mscache=1

- iTunes U Guidelines: Creating a Course
  images.apple.com/support/itunes-u/docs/iTunesU_Course_Guidelines_011912.pdf

- iTunes U Support Communities
  discussions.apple.com/community/itunes_u/

iTunes Support
The iTunes product support pages are packed with information to help you learn how to use iTunes and assist you with any questions you may have. The support resources include all iOS device manuals and information about system requirements and file locations. User discussions, articles, and the latest versions of iTunes updates can be found here.
www.apple.com/support/itunes

Accessibility
- Accessibility—information about features included with OS X, iPhone, iPad, iPod, iTunes, and other resources
  www.apple.com/accessibility

- Apple Special Education
  www.apple.com/education/special-education

iLife
- iLife '11 overview
  www.apple.com/ilife

- iLife '11 Video Showcase
  www.apple.com/ilife/findouthow

Apple Professional Development

Apple Professional Development workshops are an effective way to get up to speed quickly with your new classroom iPad and iPod touch devices. Offering 15 onsite hands-on workshops, the Apple Professional Development team delivers training tailored to meet your faculty's skills and needs. Workshops such as Language Development (iOS), Design Curricula, and Special Education (iOS) are just some of the courses available to help you integrate new skills and expand instructional practices using iPad and iPod touch.
www.apple.com/education/professional-development

Additional Websites

- Apptivities—Apple Distinguished Educators present activities to support teachers in using apps to improve student learning
  www.apptivities.org

- Education Apps Review
  www.iear.org

- Teach with Your iPad—wiki about using iPad in the classroom
  teachwithyouripad.wikispaces.com

- iPad Academy—training, tips, and tutorials
  ipadacademy.com

Accessories for iPad and iPod touch

Many types of accessories are available to enhance the use of iPad and iPod touch for teaching and learning. These include cables and connectors for connecting a TV or projector to your iOS device, such as the Apple Digital AV Adapter, Apple VGA Adapter for iPad, or the Apple Composite AV Cable, headphones with a microphone for recording, speakers, cases, power adapters, and more.

External speakers that connect to iPad, iPod touch, or a Mac are helpful when you want to play back content from the device or a computer for the whole class to hear. The iPad Dock gives you easy access to a dock connector port for syncing or charging and an audio line out port for connecting to powered speakers with an optional audio cable. You can connect a document camera to an iPad or iPod touch to project an image of the device's screen to the class. Cases can come in handy if you plan to have students take the devices out of the classroom.

Apple TV allows you to watch content in iTunes or on iPad or iPod touch (with AirPlay, included with iOS 4 and later). And with the Remote app, you can even use the iPad or iPod touch to control Apple TV playback on your TV.

For details about accessories for iPad and iPod touch, visit www.apple.com/ipad/accessories and www.apple.com/ipod/accessories.