iPads in the Classroom

TEC 964
Fresno Pacific University

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Syllabus

TEC 964:   iPads in the Classroom
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Course Description

The iPad has proven its tremendous potential to revolutionize the way students learn and teachers teach. This versatile teaching and learning tool can become a textbook, calculator, drawing pad, interactive map, or speaking dictionary – all with an intuitive swipe of a finger. The iPad brings the world (by way of the Internet) literally into your hands.

On the course website is an iPad simulator, developed by the instructor, which simulates an iPad on a PC or Mac, so owning an iPad is not necessary to complete the course. Scores of curricular apps, from the tens of thousands available (for all grade levels and most subjects), are demonstrated on the simulator.

This course will focus on the classroom use of educational apps (many of them free) now available. The iPad is a perfect way to integrate technology into the classroom and into the hands of students; this course will help you do just that!

All assignments may be completed without classroom participation. Instructor support is readily available by email and phone. Additional information may be found at: www.steveyoungfpu.net

Course Website

www.ipad.steveyoungfpu.net

 Primary Learning Outcomes

Students will:

• Learn the basic functions of the iPad.

• Find the right software and hardware to address their educational needs.

• Integrate new technology into the classroom environment.

• Explore and use various educational software programs for the iPad.

• Learn the data collection and analysis capabilities of the iPad.

Standards - Based Instruction

. . . To ensure that students are prepared for their future we should: include technology and information literacy in state and local standards for what students should know and be able to do; ensure students use technology appropriately and responsibly; develop new student assessment tools; and strengthen partnerships with industry to help meet the work force needs of the future.

<div align="right">Taken from the Executive Summary of the U.S. Department of Education National Education Technology Plan
(http://www.ed.gov/Technology/elearning/)</div>

Assignments contained within this course meet several important proficiency guidelines as defined by **ISTE** (International Society for Technology in Education).

The ISTE Standards provide a framework for learning, teaching and leading that is amplified by technology. They provide a roadmap for educators worldwide as they navigate decisions about curriculum, instruction, professional learning and the transformation of pedagogy with technology.

For more about ISTE and the ISTE standards go to: ***www.iste.org/standards***

The seven Educator Standards are:

1. **Learner** - Educators continually improve their practice by learning from and with others and exploring proven and promising practices that leverage technology to improve student learning.

2. **Leader** - Educators seek out opportunities for leadership to support student empowerment and success and improve teaching and learning.

3. **Citizen** - Educators inspire students to positively contribute to and responsibly participate in the digital world.

4. **Collaborator** - Educators dedicate time to collaborate with both colleagues and students to improve practice, discover and share resources and ideas, and solve problems.

5. **Designer** - Educators design authentic, learner-driven activities and environments that recognize and accommodate learner variability.

6. **Facilitator** - Educators facilitate learning with technology to support student achievement of the 2016 ISTE Standards for Students.

7. **Analyst** - Educators understand and use data to drive their instruction and support students in achieving their learning goals.

Each standard is broken down into several subsections (a, b, c, etc.). The relevancy of these standards to this course is one of awareness and familiarity. Later in the course you will be asked to select a number of assignments and assign an ISTE standard and subsection to them.

Grading

FPU requires all instructors to submit student grades electronically. For me to do this you will need to request online grading. Please refer to the instructions at the end of this workbook detailing the process.

Course Requirements

Computer with Internet connection and printer (black and white will suffice).

General Information

For information on the Fresno Pacific University Academic Policies and Procedures for Independent Study Courses, go online to ***https://ce.fresno.edu*** and click the 'CE Policies and Procedures' link at the bottom of the page.

When all assignments have been completed, return your packet to the address on page 2 of this workbook. It is absolutely imperative you label your packet with your full name; without identification I've no idea whose work I'm grading! Remember to request online grading the day you return your packet (no sooner, please). See the back of this workbook for detailed information on how to go about requesting online grading. Written assignments may be word processed or handwritten (please consider word processing if your penmanship is as illegible as mine!). Return only your completed assignments, not the entire workbook. I suggest you generate and retain a copy of your work so you will have a back-up to resend in the unlikely event the post office loses your packet - an extremely rare occurrence, but not worth taking the chance that it might happen to you.

Please ensure you have affixed adequate postage to your packet; ***insufficiently or unposted packets will not be accepted.*** I can no longer accommodate packets returned which require my signature for delivery. If using USPS Express Mail remember to waive the signature requirement as the carrier will not deliver until someone is home to verify receipt. If you are concerned about delivery of your packet, rather than asking me to confirm receipt I ask that you please add "Delivery Confirmation" so you can track delivery online.

I strive to process grades expeditiously but found that the time spent responding to e-mails to confirm delivery significantly cut in to my allotted grading time. Thanks for your cooperation. Once I have reviewed your work and submitted your grade I will email you notification that your grade is in FPU's hands, awaiting posting. Per FPU policy, a minimum of one week per unit of study (three weeks) must transpire from date of enrollment to the postmark on your returned packet. I can not accept coursework early; ***if your packet is postmarked less than three weeks from your date of enrollment expect me to return it to you so you can hold it the required length of time to resubmit then.*** Most importantly, never forget that I am readily available via e-mail (preferred) or phone (evenings and weekends) so do not hesitate to call if questions or concerns arise. Thanks!

Assignments (totaling 100 points, maximum):

Pre-course survey	(4 Points)
"Pockets of Potential" reflections	(10 Points)

iPad - Intro

Survey of apps on iPad Simulator	(10 Points)
Record of experience emailed to instructor	(10 Points)

iPad - Curricular Apps

Exploring apps with iTunes	(10 Points)
Exploring apps at selected websites	(10 Points)
Exploring teacher productivity / Special needs apps	(10 Points)

iPad - Curricular Exploration

Software evaluations (3)	(3 @ 5 Points each)	(15 Points)
Lesson plans (3)	(3 @ 5 Points each)	(15 Points)

Post-course survey	(3 Points)
Standards Correlation Chart	(3 Points)
Course Evaluation	
Submit Request for Online Grading	

Instructor/Student Contact

I will email you to verify receipt of your registration and let you know I am preparing your materials for shipping (usually the next day), and again, once I have submitted your grade to FPU. You will also be asked to e-mail me as part of your required course assignments (Assignment #4), but please never hesitate to contact me if questions arise as you work through the material - that's why I'm here! When contacting me, email is preferred. If phoning, please do so after 10:00 AM PT (being mindful of time zone differences) as early morning phone calls wake my family. Thanks for your understanding and cooperation.

Grading Scale

Letter grades, should one be requested, will be on the following scale:

90% -100% = A	80% - 89% = B	79% or below = 'No Credit'

Participants striving for an 'A' should demonstrate the ability to follow directions, neatness and pride in their work, as well as thoroughness and thoughtfulness in responses to written assignments.

Evidence of Learning

Students will be evaluated on the ability to follow directions as described in the workbook. Written assignments should contain thoughtful, reflective responses applicable to their personal and/or professional experiences which indicate they have put thought and effort in to their replies.

Schedule of Topics and Assignments

Assignment 1:   Pre-Course Survey
Assignment 2:   "Pockets of Potential" Reflection
Assignment 3:   iPad Simulator Checklist
Assignment 4:   Instructor Contact
Assignment 5:   Exploring iTunes App Store
Assignment 6   Exploring App Websites
Assignment 7:   Teacher Productivity and Special Needs Apps
Assignment 8:   Software Evaluation 1
Assignment 9:   Software Evaluation 2
Assignment 10:   Software Evaluation 3
Assignment 11:   Lesson Plan 1
Assignment 12:   Lesson Plan 2
Assignment 13:   Lesson Plan 3
Assignment 14:   Standards Correlation Chart
Assignment 15:   Post-Course Survey

Grading Rubric	Exemplary (A)	Passing (B)	Failing (No Credit)
Effort and Perseverance	Projects were continued until complete; effort set forth surpassed that required; took pride in going beyond the basic requirements.	With a bit more effort and dedication project could have improved; lacks finished quality.	Project was not seen to completion; work inadequate. Seems hurried to "just get it done" and move to the next project.
Written Assignments	Depth of thought with thorough, candid, and thought-provoking replies which reflect personal / professional experiences. Rare, if any, errors in spelling, punctuation, or grammar. Captivating, interesting and pleasurable to read.	Replies vague, generic, superficial. Strays from topic. Errors in grammar, spelling and punctuation a distraction. Word processing advised due to poor penmanship. Seems rushed. Not engaged in topic.	Replies missing or incomplete. Did not follow directions. Gave only "Yes" or "No" replies without offering further discussion to justify the response.
Software Evaluations	Form complete with thorough responses relating directly to curricular use of the software.	Form completed but additional comments missing or incomplete.	Form incomplete with no additional comments.
Lesson Plans	Enthusiastically developed creative and engaging lesson plans which thoroughly incorporated the topic in to the curriculum and were grade and skill level appropriate.	The lesson plans incorporated the topic selected, but not as detailed or engaging as hard work could make them; not grade or skill level appropriate.	Lesson plans incomplete or did not demonstrate incorporation of the topic chosen.

Desired Student Outcomes

The following statement reflects the Desired Student Outcomes as it relates to coursework at Fresno Pacific University's Center for Professional Development/Independent Studies:

"Graduate level course work reflects Fresno Pacific University's Desired Student Learning Outcomes as it applies to professional development to demonstrate the following:

- *Oral and written communication in individual and group settings*

- *Content knowledge, and application of such knowledge in the students' area of interest to affect change*

- *Reflection for personal and professional growth*

- *Critical thinking*

- *Cultural and global perspectives to understand complex systems*

Computational/methodological skills to understand and expand disciplines, including an understanding of technological systems."

References

www.iste.org/

www.joanganzcooneycenter.org/pdf/pockets_of_potential.pdf

http://www.joanganzcooneycenter.org/?s=ipads

www.eduweb.vic.gov.au/edulibrary/public/ict/ipodtouchresearch2009.doc

https://thejournal.com/whitepapers/2016/11/jamf-software-transformative-learning-with-ipads-111816.aspx

http://www.centerdigitaled.com/classtech/Impact-iPad-K12-Schools.html

http://www.iste.org/Standards/standards-for-teachers

Policy on Plagiarism

"All people participating in the educational process at Fresno Pacific University are expected to pursue honesty and integrity in all aspects of their academic work. Academic dishonesty, including plagiarism, will be handled according to the procedures set forth in the Fresno Pacific Catalog."

Course Completion Checklist

☐   Assignment 1:   Pre-Course Survey

☐   Assignment 2:   "Pockets of Potential" Reflections

☐   Assignment 3:   Virtual iPad Checklist

☐   Assignment 4:   Instructor Contact

☐   Assignment 5:   iTunes App Store

☐   Assignment 6   App Website Survey

☐   Assignment 7:   Teacher Productivity Apps

☐   Assignment 8:   Software Evaluation 1

☐   Assignment 9:   Software Evaluation 2

☐   Assignment 10:   Software Evaluation 3

☐   Assignment 11:   Lesson Plan 1

☐   Assignment 12:   Lesson Plan 2

☐   Assignment 13:   Lesson Plan 3

☐   Assignment 14:   Standards Correlation Chart

☐   Assignment 15:   Post-Course Survey

☐   Course Evaluation

☐   Submit Request for Online Grading

Introduction

Upon completion of this course I would like for you to think of the iPad as valuable classroom tools; devices that allows you to explore, analyze, store and retrieve information. These devices create a very personal learning experience - cradled in a student's hand, they become extensions of his or her world, providing nearly limitless vistas into not only knowledge, but a deeper understanding of the world.

Many teachers resist using technology in their classroom because they are intimidated by it. For this reason, a major objective of this course is to take away the mystery that often surrounds these machines by emphasizing their use as tools.

This course offers several modes of instruction; this booklet, which contains basic information about the iPad, resources for researching apps that would be relevant to your specific teaching situation, as well as thought-provoking articles on why and how to use mobile learning devices in the classroom.

Most course resources are found on the TEC 964 website. Scores of apps are featured, giving you the opportunity to see short videos of each in operation. There are about ninety apps on the iPad simulator.

www.ipad.steveyoungfpu.net

Take the time and look at each of these apps, even if they are outside of your grade / subject area. They will give you a solid understanding of the capabilities and possibilities of the apps currently available for the iPad.

These apps, as well as those that you research and explore yourself, will be the basis of formulating and organizing your thoughts on how to use these programs in your classroom. To demonstrate this understanding you will be asked to prepare several software evaluation forms and develop lesson plans. This process will not only familiarize you with what to look for in a viable app, but to strategize how the iPad, and those carefully chosen apps, can fit into your existing curriculum.

I understand that some who take this course will not have a classroom set of iPads - and am aware that some assignments will require what Einstein called 'thought experiments'. Despite this limitation, I am confident this course will give you the background knowledge and experience to implement this fantastic tool into your classroom in the very near future!

The images contained in this workbook are a combination of iOS 12 and iOS 13 screen captures from an iPad Air, and an iPad Mini, and an iPhone. Descriptions and directions are applicable for devices running iOS 10 and later, unless otherwise noted.

Course Website - www.ipad.steveyoungfpu.net

Among other resources, the course website contains links to view videos of iPad educational apps, divided into categories.The lower part of the page has links to web pages and PDF forms, which open in a new browser window.

The upper part of the screen has an 'iPad Simulator', which will display videos of apps. The right hand column is a listing of app categories - click on a label will display apps within that category. Click on an app icon will display the relevant video, app discription and link to the Apple App Store listing.

Please be sure to read the 'Read Me' page for instructions.

Welcome to the TEC 964 iPads in the Classroom web page!

Clicking a category name on the right hand menu will display a group of apps which are illustrative of a general curriculum area.

Clicking the app name will display information about that app, and play a short (non-interactive) video. Each video lists its running time and whether it is silent or has sound.

Clicking the video will start / pause the video.

At the bottom of each app description is a link to the Apple webpage giving a full discription of the app.

Click the 'Return to Categories' link to return to the main menu.

Please note that no endorsement is intended by the inclusion of the apps, and are present only as an illustration of the scope and variety of educationn apps available. Differences between the descriptions and / or videos and the actual apps may appear due to updates by the app publisher. Copyright is held by their respective publishers.

Note the links below:

- Intro / Read Me
- Home Screen
- Apple
- Teachers
- Early Learners
- Elementary
- Reference
- Language Arts
- Social Studies
- Math - Science
- Health - P.E.
- Art - Electives
- Special Needs

- Teach Aide
- Teacher
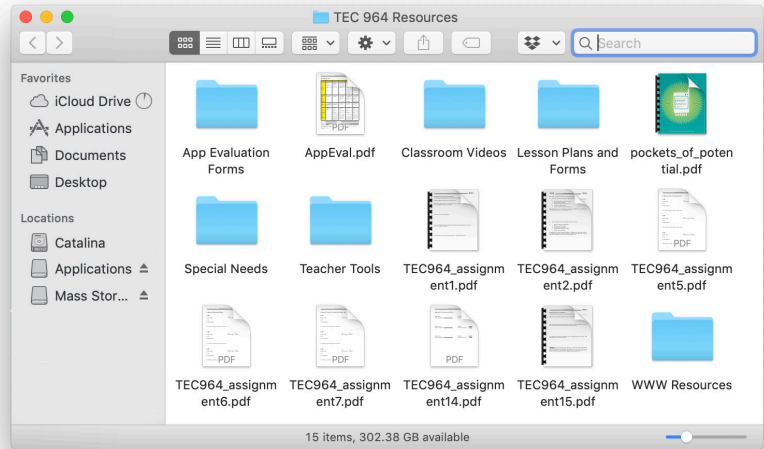- DocAS Lite
- Too Noisy
- Class Dojo
- Classroom Timer

The lower part of the page is divided into columns, where you will find web links, videos and other resouces for the course.

Readings	Videos	App Websites	PDF Forms	Other Links
Pockets of Potential	Education with iPad	Apple App Store	Assignment 1	Pad User Guide for iOS 13
iPads and Learning	Apple iPad Commercial	Apps for Teachers	Assignment 2	Pad User Guide for iOS 12
Influence of iPads	iPad News Story	App Annie	Assignment 4	Apple Apps Support Page
iPad Classroom Study	Student Perspective	Math Apps	Assignment 5	Education Deployment Guide
	iTunes U	Science Apps	Assignment 6	Creativity with iPads
		Educational Apps	Assignment 7	Apple's iPad Page
Downloads	Instructor Welcome	App Advice	Assignment 14	Example Student Agreement
Course Forms and Files		Special Needs	Assignment 15	
			Evaluation Form	

Course Resources

It is recommended that you download the 'Course Forms and Files' to your computer for easy access. This folder contains resources used throughout the course, including surveys, question forms, lesson plan forms and additional readings and videos.

Downloads

Course Forms and Files

TEC 964 Resources

Favorites
- iCloud Drive
- Applications
- Documents
- Desktop

Locations
- Catalina
- Applications
- Mass Stor...

App Evaluation Forms	AppEval.pdf	Classroom Videos	Lesson Plans and Forms	pockets_of_potential.pdf
Special Needs	Teacher Tools	TEC964_assignment1.pdf	TEC964_assignment2.pdf	TEC964_assignment5.pdf
TEC964_assignment6.pdf	TEC964_assignment7.pdf	TEC964_assignment14.pdf	TEC964_assignment15.pdf	WWW Resources

15 items, 302.38 GB available

iPad User Guide

Apple Inc.

★★★★★ 4.0, 145 Ratings

View in Apple Books ↗

iPad User Guide

iPadOS 13.3

	1	2	3	4	5
Does what it says it's going to do.	☐ Misses the mark completely. May freeze. Has typos, etc.. Back to the drawing board!	☐ Minimal Value. Not complete. Doesn't go far enough. Not intuitive to operate, "klunky"	☐ Does what is says, but no more. Little audio support. Could use some tweaking to make it better.	☐ Does what it says, and more. Has support for more than 1 learning modality (ex: auditory/visual learner). Ties directly to curriculum. Easy to navigate, once you have been trained.	☐ Greatly exceeds expectations. Has value to students for age and subject. Either the perfect nugget for a single subject or has application across curriculum or ages. Easy to navigate.
Use of Multimedia: audio visual text interactivity animation video	☐ Makes use of text or picture only.	☐ Brings in at least 2 media types.	☐ Has 2 media types with at least 1 of following: Limited Audio support. Limited Interactivity.	☐ Has 2 media types with at least 1 of following: Significant Audio support. Well placed Interactivity.	☐ Has a high level of all the following: Text, Visuals, Audio, Interactivity Great support for different learning modalities.
Overall Educational Value	☐ Very little other than teaching ipod touch maneuvers. Too much like a game	☐ Still game-like but has some underlying benefit.	☐ Sufficient educational value.	☐ Definite educational value.	☐ Exceptional Educational value.
Options & Settings - Adjustments can be made to suit student needs: volume text size language difficulty level tracking	☐ No options, settings, help or support.	☐ Has 1 of the following: Options or settings. Keeps track of user data. Levels of difficulty. Support (ie help if incorrect answer). Adjust levels if too many incorrect.	☐ Has 2 of the following: Options or settings. Keeps track of user data. Levels of difficulty. Support (ie help if incorrect answer). Adjust levels if too many incorrect.	☐ Has 3 of the following: Options or settings. Keeps track of user data. Levels of difficulty. Support (ie help if incorrect answer). Adjust levels if too many incorrect.	☐ Has 3-4 of the following: Options or settings. Keeps track of user data. Levels of difficulty. Support (ie help if incorrect answer). Adjust levels if too many incorrect.

00:00:00

Assignment 1: Survey #1 - Pre-course Survey

As with all written assignments in this course, you may either word process and print out your responses then submit a copy, or write directly in the workbook and return a copy with your completed coursework. Please, do not return the entire workbook. Interactive PDFs of this form are located on the course website - please keep in mind the length of your responses will be limited to the space provided within the pdf form. You can download the form first and save your responses (recommended) or print the form online.

What grade(s) and subject(s) do you currently teach?

What type(s) of technology is currently available to you at home? What type(s) of technology is currently available to you at your school?

How would you rate your proficiency?

Are you currently using technology to deliver instruction or prepare information for your classroom? If so, what are you doing?

Do you feel that computer technology at your site is being utilized effectively?

Assignment 1: Survey #1 (continued)

What prior experience do you have using an iPad?

Do you know of a district, school or colleague currently using iPads to deliver instruction?

If so, what have you heard about their experiences?

In your school environment, how would you describe the willingness to try new technologies?

What do you hope to get out of this course?

Assignment 2: Pockets of Potential

Why Teach With Mobile Technologies, Like the iPad?

Over forty years ago a landmark study by Joan Ganz Cooney ultimately led to the creation of the wildly popular and overwhelmingly beneficial educational television program, Sesame Street. As we all acknowledge and appreciate, Sesame Street has and continues to shape the lives of so many of our children and how, and how well they learn. To quote Ms. Cooney,
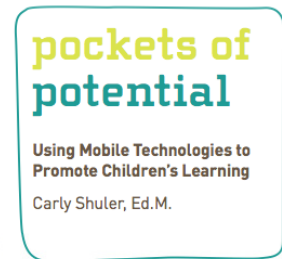
"Technology is everywhere children turn. However, finding the positive potential of new media to accelerate children's learning is not yet part of our national conversation. If we can harness media as a powerful teaching tool, we can help children grow-up as literate, responsible global citizens. Now is the time to turn the new media that children have a natural attraction to into learning tools that will build their knowledge and broaden their perspectives."

Joan Ganz Cooney

"The mission of The Joan Ganz Cooney Center is to catalyze and support research, innovation and investment in digital media technologies to advance children's learning."

(Found at http://www.joanganzcooneycenter.org/about/our-mission.html)

As a result of Ms. Cooney's insight and dedication, and in cooperation with PBS.org, The Sesame Workshop (formerly known as CTW - Children's Television Workshop) was formed, along with a new center devoted to accelerating children's learning in a rapidly changing world. Focusing their attention on the educational challenges children face today, the Joan Ganz Cooney Center of The Sesame Workshop's mission today is asking the 21st century equivalent of her original question, "How can emerging media help children learn?"

As an introduction to the study and its findings, Michael H. Levine, Ph.D., Executive Director of the Cooney Center of The Sesame Workshop, and Carly Shuler, Ed.M. write about her study's findings, as follows:

"The most ubiquitous technology in children's lives today are mobile devices — tools such as cell phones, iPods, and portable gaming platforms that traverse home, school, and play via the hands and pockets of children worldwide. While these devices are a source of fun and entertainment, they also offer new ways to stimulate breakthroughs in children's learning and the quality of teaching. Our latest study, Pockets of Potential, documents the untapped potential of mobile learning and outlines a first-ever national mobile learning strategy."

"Based on interviews with mobile learning experts from around the world, the study found that just as Sesame Street transformed television into a revolutionary learning tool for preschoolers, mobile learning technology may represent the next frontier. Pockets of Potential includes an inventory of notable mobile learning examples, such as MIT's Augmented Reality Games which use GPS technology to engage people in simulation games that combine real world and virtual experiences."

"PBS Kids' Learning Letters with Elmo used video and text messaging to send literacy tips to parents of preschoolers, successfully engaging lower-income families. In the United Kingdom, Wolverhampton Local Authority's award-winning Learning2Go initiative delivers 24/7 personalized learning to over 1000 students by giving them the choice to learn on their own schedule. The report offers a blueprint for national action."

(found at http://spotlight.macfound.org/blog/entry/levine_shuler_pockets_potential/)

On the course website, you will find a copy of *Pockets of Potential: Using Mobile Technologies to Promote Children's Learning*[1] - a report compiled and presented by Carly Shuler, Ed.M., of the Joan Ganz Cooney Center of Sesame Workshop.

The report is in Adobe .pdf format, and you will need a compatible Acrobat reader to access it. If your computer does not have Acrobat Reader, it can be downloaded at no cost from www.adobe.com

[1] *Shuler, C. (2009). Pockets of Potential: Using Mobile Technologies to Promote Children's Learning, New York: The Joan Ganz Cooney Center at Sesame Workshop.Used with permission.*

After reading "Pockets of Potential" reflect and respond to the following **three** questions:

1)   In her report, the author lists five "Key Opportunities in Mobile Learning" :

    1.   Encourage "anytime, anywhere" learning
    2.   Reach underserved children
    3.   Improve 21st century social interactions
    4.   Fit with learning environments
    5.   Enable a personalized learning experience

Considering these five, which opportunity do you feel would be BEST for your students, and why? Detail your thoughts in a brief paragraph or two.

2)   Upon evaluating the five "Key Challenges in Mobile Learning," :

    1.   Negative aspects of mobile learning
    2.   Cultural norms and attitudes
    3.   No mobile theory of learning
    4.   Differentiated access and technology
    5.   Limiting physical attributes

As presented in the report, which ONE of these five discussions do you see as offering the most significant argument AGAINST integration of mobile learning technologies in to your classroom? Substantiate your opinion in a brief paragraph or two.

3)   The report outlines five "Goals for Mobile Learning"

    1.   Learn : Understand mobile learning as a unique element of educational reform
    2.   Develop : Build mobile learning interventions
    3.   Promote : Engage the public and policy-makers in defining the potential of mobile devices for learning
    4.   Prepare : Train teachers and learners to incorporate mobile technologies
    5.   Stimulate : Generate new leadership support for digital learning

In a brief paragraph or two, offer your opinion as to which ONE goal you feel is most important for the success of mobile learning in your teaching situation, and why.

iPad Glossary

Accelerometer
Measures motion and gravitational effects. In an iPad, used to detect screen orientation to display a portrait view when the device is held vertically, or widescreen view when the device is held horizontally. The accelerometer in the iPad lets you control some apps by tilting and tipping the device.

AirDrop
Using WiFi and Bluetooth, share photos, videos, websites, locations, and more with other nearby iOS devices.

AirPlay
Technology to stream video (mirroring) to an Apple TV, and audio to a compatible speaker system.

AirPrint
Connection between an iPad, iPhone or iPod Touch to a compatible (WiFi-enabled) printer.

App
An abbreviation for "application" – a software program.

Badge
A small number superimposed over an app icon, indicating some action needs to be taken; it may be the number of apps requiring updates or emails waiting to be read.

Base Station
Any number of transmitter/receivers which, when connected to the internet, allow wireless connection to the iPad via WiFi.

Bluetooth
Wireless technology designed for transmitting data over short distances. Used for remote control devices and audio, such as Bluetooth earphones for cell phones. Bluetooth enables two or more devices to 'talk' to each other without being connected to a WiFi network.

Charging Dock
A cradle for the iPad that connects to a computer for charging the battery and transferring data. Charging Docks connect to a computer via USB.

Dock
Special row of icons along the bottom of an iPad that do not change when you swipe between Home Screens.

Double-tap
A short, quick gesture which will zoom in on a picture or column of text in a web page.

Drag
To move an icon across the screen by touching it and slowing moving your finger to a new location.

FaceTime
Apple's video calling service, which uses the rear-facing camera and WiFi to provide 'Jetson's style' two-way video conferencing.

Fast App Switcher
Apple's multitasking dock, hidden behind the regular dock and accessible by double clicking the Home Button.

Flick
A finger movement on the touchscreen, causing the screen to scroll horizontally or vertically. A short, fast vertical flick will enable the iPod Touch / iPad's inertia setting, meaning the screen will scroll a greater distance than your finger movement, then decelerate to a stop.

Folder
An icon representing a group of apps. Created by dragging one app on top of the other in 'jiggly' mode, and deleted by removing all the apps from a folder. iPhone and iPod touch can currently hold 12 apps per Folder; iPad can hold 20.

Gesture
Any number of finger movements contacting the iPad's touchscreen.

Gyroscope
iOS devices now have a 3-axis gyroscope built in. This can send information to apps about the device's position in space and relative movement.

Home Button
A physical button located at the bottom center of the iPad. The button will quit an app, or if no app is running, move to the first home screen.

Home Screen
Apps on the iPad are arranged in groups - 16 per page on the iPod Touch and 20 per screen on the iPad - the maximum number which fit on to one screen. Additional home screens are created automatically to accommodate more apps, up to a max of 11 screens.

Hot Spot
A location from which wireless (WiFi) connectivity to the internet is possible.

iCloud
Apple's online service for iOS devices and Mac computers; used for backups, storage, and syncing data between multiple devices.

iMessage
An system for sending free text and multimedia messages from one iOS device to another over cellular or WiFi networks.

iOS
Apple's term for the operating system of all its mobile devices. An operating system is the set of instructions which gives a computer its capabilites and 'look and feel'.

Mirroring
The ability, through Airplay, to display the iPad's screen onto another device (such as a video projector).

Apple Pencil
A wireless stylus pen for use with supported iPads.

Pinch
A gesture whereby the screen image is enlarged (zoom in) or reduced (zoom out). The thumb and forefinger are moved in a pinching motion - pinch together for zooming out and spread apart for zooming in.

QuickTime
Apple's video technology, used to play movies on iOS.

Retina Display
Very high-resolution display available on the newest generation of iOS devices (1st generation iPad Mini excluded).

Scroll
A slow, up or down movement of the finger to move screen content vertically.

Scrub
The iPad's audio and video recordings display a horizontal bar, representing the timeline of the recording. A small dot, which moves from left to right as the recording is playing, shows the playhead, or the current location along the timeline. Moving the dot back and forth with your finger (scrubbing) rewinds or fast-forwards the recording.

Siri
Apple's voice controlled virtual assistant that used artificial intelligence to answer questions and perform tasks.

Sleep/Wake Button
Physical hardware button on top of the iPhone, iPod Touch, and iPad. Used to power on, wake from sleep, put to sleep, and power down iOS devices.

Spotlight Search
Part of the iPad Home Screen system, accessible by swiping far left to right from the Primary Home Screen, clicking the Home Button when on the primary Home Screen, or inside Apple apps like Messages, Mail, Contacts, iPod, etc.. Performs text-based searches and shows results for contacts, apps, music, podcasts, videos, audiobooks, notes, email, calendar events, and iMessages.

Swipe
A horizontal finger movement on the touchscreen, causing the screen to scroll horizontally. This gesture is typicaly done to move from one home screen to another. It is also the action which turns pages in an e-book.

Syncing
The process of connecting the iPad to a computer running iTunes and creating an exact duplicate (depending on user-selected preferences) of music, apps and other media. The syncing can run both directions - iTunes on a computer to iPod Touch / iPad, or iPod Touch / iPad to iTunes on a computer. Syncing can also be accomplished with iCloud on newer devices.

Tap
A simple, quick touch to an icon on the iPad's touchscreen. This gesture is analogous to clicking the mouse on a computer.

Touch ID
An electronic fingerprint recognition feature, that allows users to unlock the iPad.

Touchscreen
The Touchscreen allows the iPad to determine the location and movement of simultaneous touches in multiple locations. Made of multiple layers of capacitive materials and sensors, it works only if you touch it with your fingertip -- it does not respond when contact is made with a stylus or any non-conductive material.

USB
USB (Universal Serial Bus) is an interface between a computer and your iPad. A special cable, which comes with the device, plugs in to your computer's USB port for charging the battery and syncing with iTunes.

VPN
Virtual Private Network; enables you to securely access your school's network behind a network firewall by using an encrypted connection that acts as a secure pathway for data.

WiFi
WiFi is a protocol which allows various kinds of devices to wirelessly talk to each other. A WiFi-enabled device can connect to the Internet when within range of a wireless network. The coverage of one or more (interconnected) access points - called hotspots - can extend from an area as small as a few rooms to as large as many square miles. Coverage in the larger area may require a group of access points with overlapping coverage.

The iPad

In April, 2010 Apple unveiled the 'original' iPad tablet computer, considering it a new, third category of mobile device - neither smart phone nor laptop, but something in-between. The iPad could be used to read books, run apps, play games or watch video. It was described as "so much more intimate than a laptop, and so much more capable than a smart phone." The touch interface (how the user interacts with the iPad) was identical to the iPod Touch.

The original iPad was larger than the iPod Touch and iPhone, but similar in design. This 1st generation iPad weighed about 1.5 pounds, with a 9.7 inch (diagonal) touch screen. Available with 16, 32, and 64GB of flash memory storage, WiFi and Bluetooth connectivity was built-in. The iPad's battery would run up to 10 hours, and sit for a month on standby without needing a charge.

Device	Score
iPad Pro (12.9-inch 3rd Generation) Apple A12X Bionic @ 2.5 GHz	1113
iPad Pro (11-inch) Apple A12X Bionic @ 2.5 GHz	1112
iPad Air (3rd generation) Apple A12 Bionic @ 2.5 GHz	1111
iPhone XS Max Apple A12 Bionic @ 2.5 GHz	1110
iPad mini (5th generation) Apple A12 Bionic @ 2.5 GHz	1110
iPad Pro (12.9-inch) Apple A9X @ 2.3 GHz	648
iPad Pro (9.7-inch) Apple A9X @ 2.3 GHz	642
iPod (7th generation) Apple A10 Fusion @ 1.6 GHz	565
iPad (5th generation) Apple A9 @ 1.8 GHz	552
iPad Air 2 Apple A8X @ 1.5 GHz	377
iPad mini 4 Apple A8 @ 1.5 GHz	357
iPad Air Apple A7 @ 1.4 GHz	277
iPad mini (Retina) Apple A7 @ 1.3 GHz	259

A partial list of iPad models through time, showing the increases in speed and computing power. Longer lines at the top of the chart are the newer, faster iPads.

Other Links

Pad User Guide for iOS 14
Pad User Guide for iOS 13
Apple Apps Support Page
Education Deployment Guide
Creativity with iPads
Apple's iPad Page

For more complete information, see the User Guides (in PDF format) on the course website.

iOS - The Shared 'Brains' of the iPad and iPhone

OS stands for Operating System - the set of instructions that tell the computer hardware (memory chips and circuits) how to be a computer. Most likely you are already familiar with the most common OS, Microsoft Windows. When you turn your computer on, it first loads its OS from the hard drive into memory, in effect teaching itself how to be a computer, looking and acting the same as when you last turned it off.

iOS is Apple's operating system for mobile devices, developed originally for the iPhone (2007), and later deployed on the iPod Touch and iPad. It is derived from Apple's Mac OSX. The operating system uses roughly 3 gigabytes of the device's storage.

iOS Branches in two - iOS (iPhones) and iPadOS

As with most computer software, the iOS periodically gets upgraded, meaning a new version is released. Typically this is due to improvements - adding new features and capabilities to the device the software runs on. This upgrade often coincides with new and faster hardware. Think of it as dropping a new engine - one that has been modified to go twice as fast as before - in to a used car. In 2019, Apple split iOS in two, creating a sibling OS just for the iPad's larger screen. This differentiation allow Apple and other developers to play to the strength of each type of device.

As with computers in general, things can get a bit complicated with upgrades - the current iPadOS, version 13, works great on new iPads, but can slow down older iPads, or not run at all; it's a trade-off between new features and optimized speed.

New apps, written for the latest versions of iOS, may not work with older versions. For example, the iBooks app requires iOS 3.2 which first generation iPod Touches may not have. Some apps require newer versions: iOS 13 or iOS 14.
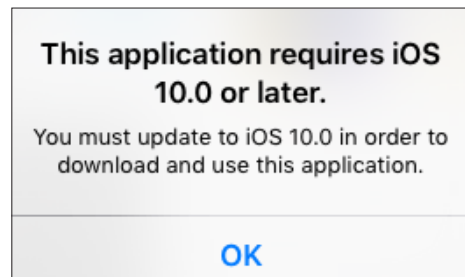
If you are using your own iPad to complete this course, and wish to find out what version of iOS your device currently is using, tap the Settings icon, then General, then About.

iPad Models

iPadOS 14 was released in September of 2020. Upgrading the iPadOS, whenever possible, is usually a good thing - newer versions have improved or new features and capabilities. It is the iPadOS, not the hardware, that generally advances the capabilities of the iPad. The illustration and prices (starting price) below is current as of 10/15/20.
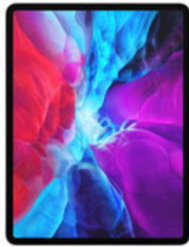
iPad Pro 12.9-inch (4th generation)	iPad Pro 11-inch (2nd generation)	iPad Air (4th generation)	iPad (8th generation)	iPad mini (5th generation)
$999	$799	$599	$329	$399

The new iPad Pro has an upgraded camera system, similar to an iPhone.

iPads come in several memory configurations. The price increases relative to the amount of memory, in about $100 increments.

128GB

256GB

512GB

1TB

All iOS devices come with WiFi to connect with the Internet via a wireless hotspot. This connection is essential, at least initially, to download apps and enable the functionality of Mail, Safari, iTunes and other programs which retrieve their data via wireless internet.

The iPad comes in WiFi and WiFi / Cellular models. The cellular option allows Internet connectivity anywhere (not just a WiFi hotspot) but requires activation and, like a cell phone, is charged a monthly service fee by a carrier.

When purchasing, consider what will ultimately be stored. Apps, music, and especially videos take up memory; once you run out there is no way to add additional memory. In most educational settings where a dozen or so apps will be used (and few or no videos stored) the smallest memory available should suffice.

The iPad Pro

The iPad Pro was released on September, 2015. The current model is the iPad Pro 4 with either a 12.9" or an 11" display has a faster processor, quad-core graphics processor, an 12-megapixel rear-facing camera with 4K (high definition) video recording. The new CPU and graphics chip means the iPad Pro is faster and capable of displaying much higher resolution images.
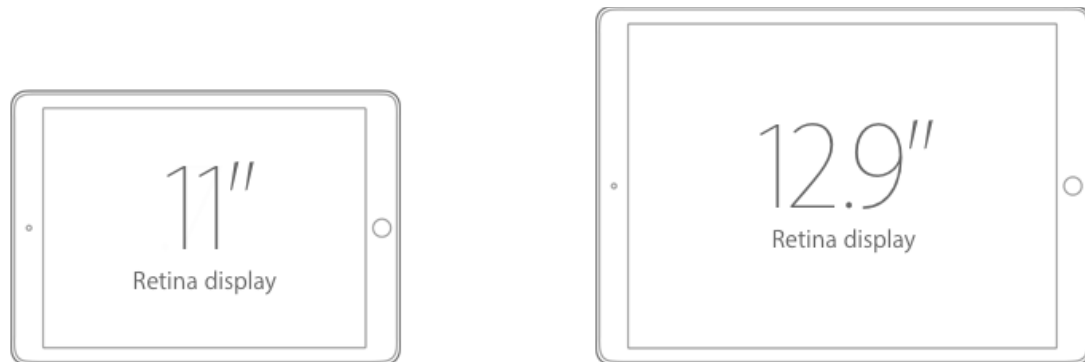
The distinguishing feature of the iPad Pros (other than its speed) is it can be used with the Apple Pencil to draw on the screen with a very high degree of precision. This feature is meant to be used by artists and designers. The pencil is angle and pressure sensitive, so the harder you press the pencil against the iPad screen, the bolder the line. Now in its second greration the Apple Pencil 2 works only with iPad Pros, while the older Apple Pencil 1 work with some less expensive models.
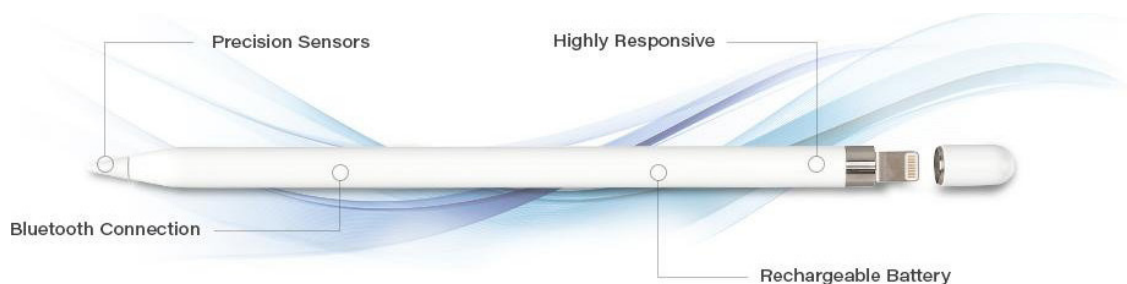
The iPad Air

Essentially a smaller, lighter version of the 11" iPad Pro.

The iPad

The least expensive iPad, taking back the original one-word name. It has a slightly slower processor than its siblings.

The iPad Mini

There are now five generations of the iPad Mini. The iPad Mini is just that - a 7.9 inch version of the iPad's 9.7 inch screen. The 128GB model costs $399, the second least expensive tablet Apple currently has on the market.

Offering all the features available on it's larger, older siblings, the iPad Mini runs the same iPadOS software and apps as other iPads. The difference in size has both pluses and minuses - for those of us who 'grew up' with the larger models, it takes some getting used to. On the other hand, it is very nice to be able to slip it into a coat pocket or small backpack. The screen, being about the size of a large paperback book, is very conducive to reading iBooks and viewing web pages. As with other devices in school settings, I would suggest a sturdy case and a screen cover to protect the Mini from accidents.

Physically and functionally, the iPad Mini is nearly identical to full-size iPads; button and camera placement, connections (using the Lightning connector), and speakers all share the same locations with other models.

iPod Touch

The iPod Touch is essentially an iPhone without the phone - the latest verion (7) has a faster processor, larger screen (with the high-resolution retina display), a 8 megapixel camera with flash, the Siri digital assistant, and the Lightning adaptor, shown below. At $199 for the base model, it may be worth looking at for budget-conscience classrooms, but its small size makes it difficult to handle for some students and in cases where equality of access is an issue.

Lightning Connector

Introduced on September 12, 2012, the Lightning connector is used to connect Apple mobile devices like iPhones, iPads, and iPods to host computers, external monitors, cameras, USB battery chargers, and other peripherals. It replaces the original 30 pin connector used since the original iPod in 2001. Seems like a long time ago!

Parts of an iPad (button location may vary depending on model)

Status bar

FaceTime HD camera

App icons

Multi-Touch display

Home button/ Touch ID sensor

Microphones

Sleep/Wake button

Headset jack

iSight camera

Volume buttons

Nano-SIM tray (cellular models)

Speakers

Lightning connector
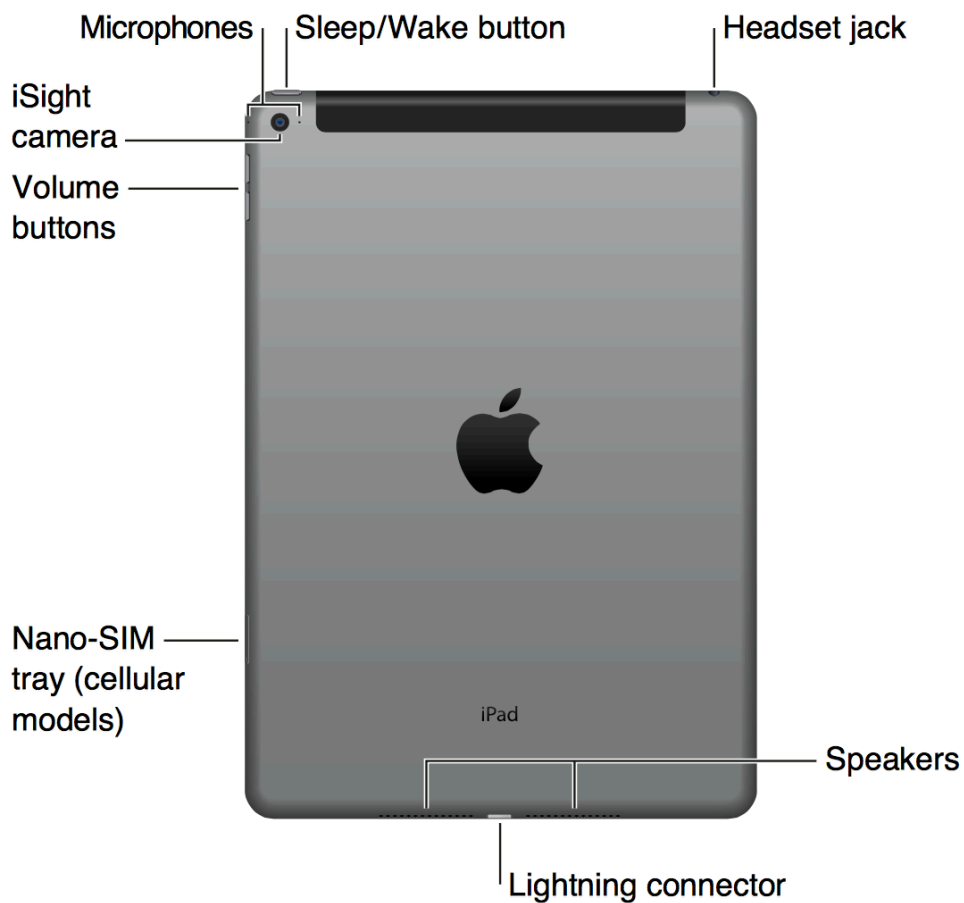
Cameras and Sensors

In addition to the touch sensors behind the iPad's screen, there are several other advanced sensors built in. The most obvious is the camera, capable of capturing high resolution images and video. The Photos app and iMovie can then be used to display and manipulate, adjust and edit the content.

The accelerometer and gyroscope work in tandem to sense the tilt and movement of the iPad. Its basic function is the rotate the screen image from horizontal to vertical when the iPad is turned. These sensors can also control objects onscreen, like a virtual ball rolling through a maze. Virtual reality apps use the sensors to shift and change images based on movement.

Below is a list of sensors in two popular models of the iPad; there are constantly being improved with each successive model.

iPad Air 4th Generation	iPad 8th Generation
12MP Camera	8MP Camera
Ambient light sensor	Ambient light sensor
Accelerometer	Accelerometer
Gyroscope	Gyroscope
Compass	Compass
Barometer	Barometer
Touch ID fingerprint scanner	Touch ID fingerprint scanner

Video Recording

1080p HD video recording (30 fps)

Slo-mo (120 fps)

Time-lapse video with stabilization

Video image stabilization

Improved face detection

3x video zoom

Video geotagging

The Sleep / Wake Button

To Turn the iPad On:
Press and hold the Sleep / Wake button until the Apple logo appears. This is the same as booting up (starting) a computer. The process takes under a minute.

Unlock / Wake iPad:
Press the Home button or the Sleep/Wake button, then drag the slider (on the display screen) to the right. In iOS 10, press the Home button twice to wake (there is no more 'slide to unlock').

Locking the iPad:
When you're not using an iPad you can lock it. When locked, nothing happens if you touch the screen. You can still listen to a recording, adjust the volume, and use the center button on your headset (or the equivalent button on your Bluetooth headset) to play or pause. By default, if you don't touch the screen for a minute, iPad locks automatically. To set the amount of time before locking: Go to Settings, then choose General > Auto-Lock and choose a time.

Turn the iPad Completely Off:
Press and hold the Sleep/Wake button until the red slider appears, then drag the slider to 'Power Off'. The iPad then shuts down, taking about fifteen seconds.

Security

Passcode Lock:
By default, iPad requires you to enter a passcode to unlock it.

Set a Passcode:
Go to Settings, then choose General > Passcode Lock and enter a 6-digit passcode, then enter the passcode again to verify it. The iPod Touch / iPad then requires you to enter the passcode to unlock it or to display the passcode lock settings.

Turn Passcode Lock Off:
Go to Settings, then choose Passcode, enter your passcode, and tap Turn Passcode Off, then enter your passcode again.

Change the Passcode:
Go to Settings, then choose Passcode, enter your passcode, and tap Change Passcode. Enter your passcode again, then enter and re-enter your new passcode.

Note: If you forget your passcode, you must restore the iPad software from your synced iTunes account, or lose all your information and media. After ten failed passcode attempts, your settings are reset to their defaults and all your information and media is erased.

Control Center

Swiping down from the top of the screen in iPadOS reveals the control center, where you can set the screen brightness, enable Airplay, and control music play. The control center is customizable, allowing the user to add and reorder buttons.

Airdrop

Airplane Mode

WiFi on/off

Audio Control Center

Rotation Lock

Screen Brightness

Screen Mirroring

Volume

Home Favorites

Living... Torch

Garage Hot W...

Maste... Fan

Living... Lightb...

Living... Apple...

Home Button

Home Button

Press the Home button once to return home - the first 'page' of buttons on your iPad. If the device is asleep, pressing the Home button will wake up the iPad.

For Siri-equipped devices, press and hold the Home button to acivate Siri.
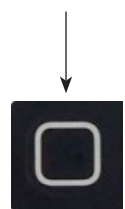
Touch Basics

There are four basic finger movements that control the iPad. With these simple, easy to learn movements, the power of the device is, literally, at your fingertips.

Tap

Tap, or quickly touch a button to activate it.

Scroll

With your finger touching the screen, slide it up or down to scroll through a page.

Pinch Apart

Pinch Together

Swipe (or Flick)

With your finger touching the screen, slide it left or right to move from page to page.
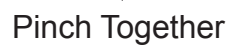
Pinch

With your index finger and thumb touching the screen, slide them apart or together to zoom in or out.

Standard Apps

As with any computer, it is the programs (or 'apps') that are the heart and soul of the machine. The iPad comes with a collection of pre-installed apps, listed on the next few pages. Many of these programs have educational value, sometimes obvious, sometimes not. Through this course you will explore several apps in detail, using the virtual iPad simulator found on the course website. As of this printing there are well over 2,000,000 apps available with nearly 100,000 classified as 'educational'. Not only do the numbers keep growing, but publishers update existing apps, providing new functionality and content.

Press the Home ⬜ button (located at bottom-middle of the device) at any time to go to the main Home screen, which contains the pre-installed applications. Tap any application's icon to launch the app. Swipe far left to right to show the Find screen, where a keyboard will appear, allowing you to search for apps, contacts and email content.

Settings
You can adjust all your settings in one convenient place. Personalize your volume limit for listening comfort. Set your wallpaper, screen brightness, and settings for network, mail, web, music, video, photos, and more. Set auto-lock and a passcode for security.

Music
Listen to your songs, audiobooks, and podcasts. Create on-the-go playlists, or use Genius to create playlists for you. Listen to Genius Mixes of songs from your library.

Videos
Watch purchased or rented movies, video podcasts, and TV shows on-the-go, or connect your device to a TV to watch on a larger screen (TV connection requires an Apple video cable, available for purchase separately).

Safari
Browse websites over WiFi with Apple's default web browser. Rotate the device sideways for widescreen viewing. Double-tap to zoom in or out - Safari automatically fits the webpage column to the screen for easy reading. Open multiple pages. Sync bookmarks with Safari or Microsoft Internet Explorer on your computer. Add Safari web clips to the Home screen for fast access to favorite websites. Save images from websites to your Photo Library. ***NOTE: Websites that use Adobe Flash will not work, as iOS does not support Flash.***

App Store
Search the App Store for applications you can purchase, download, and update using your WiFi connection. Read reviews or write your own reviews for your favorite apps. Download and install the applications on your Home screen.

Mail

iPad's work with iCloud, Microsoft Exchange, and many of the most popular email systems, including Yahoo! Mail, Google email, and AOL, as well as most industry-standard POP3 and IMAP email systems. View .pdf's and other attachments within Mail. Save attached photos and graphics to your Photo Library.

Calendar

View and search your iCal, Microsoft Entourage, Microsoft Outlook, or Microsoft Exchange calendars. Enter events on your device and they get synced back to the calendar on your computer. Set alerts to remind you of events, appointments, and deadlines.

Photos

View photos and videos taken by the iPad, received in Mail messages, or synced from your computer's photo application. View them in portrait or landscape mode. Zoom in on photos for a closer look or edit their settings (light / dark, color, etc.). Watch a slideshow. Email photos and videos, or publish them to iCloud galleries. Assign images to contacts, and use them as wallpaper.

Contacts

Get contact information synced from iCloud, Mac OS X Address Book, Yahoo! Address Book, Google Contacts, Windows Address Book (Outlook Express), Microsoft Outlook, or Microsoft Exchange. Search, add, change, or delete contacts, which get synced back to your computer.

Stocks

Watch your favorite stocks, updated automatically from the Internet. View company news and current trading information, such as opening or average price, trading volume, or market capitalization. Rotate the device to see detailed charts in landscape orientation. Drag your finger along the charts to track price points, or use two fingers to see a range between points.

Notes

Jot notes, on-the-go reminders, grocery lists, thoughts and ideas. Text can be pasted onto the notepad from an email or webpage(s).

Weather

Get current weather conditions and a six-day forecast. Add your favorite cities for a quick weather report anytime.

Clock

View the time in cities around the world - create clocks for your favorites. Set one or more alarms. Use the stopwatch with lap timer, or set a countdown timer.

Voice Memos
Record voice memos, then play them back or sync them with iTunes to listen to them on your computer. Attach voice memos to email messages.

Maps
See a street map, satellite view, or hybrid view of locations around the world. Zoom in for a closer look. Find your current approximate location with the iPad using GPS data (requires WiFi or 3G Internet connection) to find your position.

iTunes
Search the iTunes Store for music, audiobooks, TV programs, videos, and movies, and iTunes University. Browse, preview, purchase, and download new releases, top items, or choose from Apple's vast media library. Stream and download podcasts. Read reviews or write your own reviews for your favorite store items.

Camera
Built-in cameras can take still pictures and record video, which can be saved to the Photo app then viewed, edited, or transferred to a desktop / laptop computer. iPads (except 1st generation) include cameras; newer models with HD quality.

News
News collects stories from several different sources and displays them with real-time updates. Choose from a category (i.e. Science) or from a publication (i.e. New York Times) and arranges them in a newsstand format.

There are a few apps which are essential to a classroom iPod Touch or iPad, but are not included among the pre-installed apps. They are all available from the App Store at no cost.

Books
An app for downloading and organizing shelves of electronic books from the Apple bookstore or written with the iBooks Author program for the Mac. These books range from simple texts to rich interactive and multimedia experiences.

iTunes U
The free iTunes U app gives you access to the world's largest online catalog of free educational content from leading institutions - on your iPad, iPhone, or iPod Touch. Courses contain overviews, outlines and downloadable content resources.

YouTube
Play videos from YouTube's online collection. Search or browse featured, most recently updated, and top-rated videos. No longer a built-in app, it can be downloaded for free from the App Store to play the latest and best educational videos.

Siri

An intelligent personal assistant and knowledge navigator available on newer iOS devices, Siri uses a natural language user interface to answer questions, make recommendations, and perform actions. For students who want to get to specific information quickly (i.e. 'What is the capital of Brazil?'), verbally asking Siri that question is the most straight-forward way to communicate with your device. Siri is not an app, it is built into iOS 6 and above; to activate, press and hold the Home button.

What can I help you with?

Siri Commands for Calendar
- "Set up a meeting with Michael at 9"
- "Meet with Lisa at noon"
- "New appointment with Susan Park Friday at 3"

Ask Siri to set Alarms
- "Wake me up tomorrow at 7am"
- "Set an alarm for 6:30am"
- "Wake me up in 8 hours"

Ask Siri to check the time
- "What time is it?"
- "What time is it in Berlin?"
- "What is today's date?"
- "What's the date this Saturday?"

Ask Siri to use a Timer
- "Set the timer for ten minutes"
- "Show the timer"
- "Pause the timer"
- "Resume"
- "Reset the timer"
- "Stop it"

Ask Siri for Maps and Directions
- "Show me the Statue of Liberty"
- "Show me directions from Washington DC to Philadelphia Pennsylvania"

Ask Siri to Create and Find Notes
- "Note that I spent $12 on lunch"
- "Find my restaurant note"
- "Create a reading list note"

Ask Siri to set a Reminder
- "Remind me to call mom"
- "Remind me to call my mom when I get home"
- "Remind me to pick up flowers when I leave here"

Ask Siri to check Stocks
- "What's Apple's stock price?"
- "How are the markets doing?"
- "What is the Dow at?"

Ask Siri about the Weather
- "What's the weather for today?"
- "What's the weather for tomorrow?"
- "What's the high for Anchorage on Thursday?"
- "What's the temperature outside?"
- "When is sunrise in Paris?"

Ask Siri to search the Web
- "Search the web for Bora Bora"
- "Search for vegetarian pasta recipes"
- "Search the web for best cable plans"
- "Google the war of 1812"
- "Search Wikipedia for Abraham Lincoln"

Ask Siri to Launch an App
- "Play BrainQuest"
- "Open Science Quiz"

Ask a question using Wolfram Alpha
- "Define supernova"
- "What is an 18% tip on $86.74 for four people?"
- "Who's buried in Grant's tomb?"
- "How long do dogs live?"
- "What is the Gossamer Condor?"
- "Tell me more about the Gossamer Condor"
- "What's the square root of 128?"
- "How many days until Christmas?"
- "How far away is the Sun?"
- "When is the next solar eclipse?"
- "Show me the Orion constellation"
- "What's the population of Jamaica?"
- "How high is Mt. Everest?"
- "How deep is the Atlantic ocean?"
- "What's the price of gasoline in Chicago?"

The **Dock** is the area at the bottom of the home screen which contains app icons (up to 6 on the iPad). The icons in the Dock do not change from screen to screen, so they are available on any and all Home screens. You can customize your Dock, so that it contains your most frequently used apps. Customizing your dock eliminates the need to move between multiple screens to find your favorites. You can move apps on and off the Dock as desired (see Tips & Tricks).

Status Icons

The icons in the status bar at the top of the screen give information about your iPad. The time, battery status and signal strength indicator are always present; The status bar may be hidden when you launch an app.

WiFi
Indicates the device is connected to the Internet over a WiFi network. The more bars, the stronger the connection.

Network activity
Shows network activity. Some third-party applications may also use this icon to indicate an ongoing process. When active, the icon 'spins', showing data is being downloaded to the device.

VPN
Indicates that you are connected to a network using VPN (Virtual Private Network).

Lock
Indicates that the iPad is locked.

Play
Appears next to the battery icon when a song, audiobook, or podcast is playing.

Alarm
Indicates an alarm is set.

iPad Orientation Lock
The screen is locked and the orientation will not change when the iPad is rotated.

Bluetooth
Blue or white icon: Bluetooth® is on and a device, such as a headset, is connected. Gray icon: Bluetooth is on, but no device is connected. No icon: Bluetooth is turned off.

Battery
Demonstrates battery charging status (the lightning bolt or AC plug indicates the device is charging) or the current battery level.
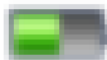
AirPlay

Starting with iOS 5 on the iPad 2, the iPod Touch 4G, and iPhone 4S - audio and video can be wirelessly transmitted via AirPlay to an Apple TV. The HDMI output of the Apple TV can then be connected to a compatible television or video projector.

AirPlay supports video mirroring - meaning the same image will appear on both the iPad and television or video projector. Connect the Apple Digital AV Adapter or Apple VGA Adapter (sold separately) and your HDTV or projector becomes a giant iPad that an entire classroom or auditorium can watch. Everyone sees what's on your display, even when you rotate your iPad from portrait to landscape, or zoom in and out on photos.

To wirelessly display an iPad screen on a video projector, turn on AirPlay to send the video and audio to an Apple TV, then use an HDMI cable to connect the Apple TV to a projector.If your projector does not have an HDMI

In OSX Yosemite and later, connecting an iPad to a Mac using a USB cable allows for the display and capture of images through the Mac's Quicktime program.

The App Store and iTunes

In addition to the pre-installed apps, you can search for, browse, review, purchase, and download applications from the App Store directly to the iPad or through iTunes. Applications you download and install from the App Store on your iPad are backed up to your hard drive or iCloud library the next time you sync with your computer.

Setting up a Free Account:

To use the App Store, an iPad must join a WiFi network that's connected to the Internet. You also need an iTunes account to download applications. By default, the device gets your iTunes account settings from iTunes. If you don't have an iTunes account, go to Settings > Store.

If you first select a free app from iTunes before you set up a new account, a 'None' method of payment appears. This will allow you to set up an account and download free apps to your iPad. To purchase apps, the easiest (and most secure) method of payment is with an iTunes gift card. When downloading an app (even a free one), you will be asked for your iTunes account username and password.
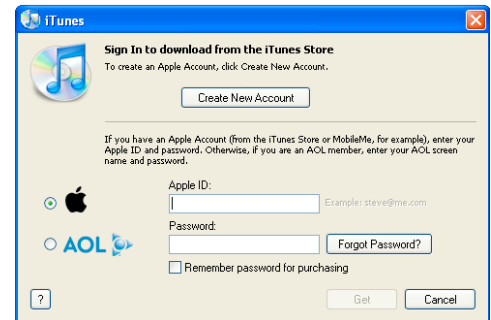
Downloading Apps

When you find an application you want in the App Store, you can purchase and download it to your iPad. If the application is free, you can download it without charge after providing your iTunes account information. Downloads for purchase are subsequently charged to your iTunes account.

Purchase and download an App:

1. Tap the price (or tap Free), then tap Buy Now.
2. Sign in to your account as requested, then tap OK.
3. If you don't have an iTunes account, tap Create New Account to set one up.
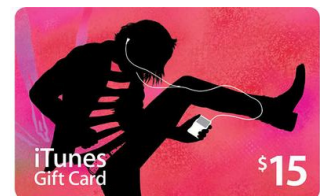
You can redeem iTunes gift cards, gift certificates, or other promotional codes to make purchases. When you're signed in to your account, your remaining store credit appears with your account information at the bottom of most App Store screens. To redeem a gift card, tap Redeem near the bottom of the Featured screen, then follow the onscreen instructions.

Some applications use automatic notifications to alert you of updates, even when the application isn't running. Notifications differ depending upon the application, but may include text or sound alerts, or a numbered badge on the App Store icon on the Home screen. If you find these annoying they may be turned off (on an app by app basis) in Settings.

See the status of downloading applications:

After you begin downloading an application, its icon appears on the Home screen and shows a progress indicator. If a download is interrupted, iPad starts the download again the next time it has an Internet connection.

Deleting / Reinstalling Applications

You can delete applications you've installed from the App Store. If you delete an application, all data associated with the application will no longer be available to your iPad. You can re-install an application and restore its data as long as you backed up your iPad with iTunes on your computer. You can also reload apps from iCloud by opening the App Store, then clicking the 'Purchased' button on an iPad or the 'Updates' button on an iPod Touch.

Delete an App Store application:

1. Touch and hold any application icon on the Home screen until the icons start to jiggle.
2. Tap the ⊗ in the upper left corner of the application you want to delete.
3. Tap the Delete button. (You may be asked for feedback about the app).
4. Press the Home button again to 'un-jiggle' the remaining apps' icons.

Updating Applications

Whenever you access the App Store it automatically checks for updates to installed apps. The App Store icon shows the total number of application updates available (note the badge on the illustration to the left, indicating, in this case, there is one update available). In iPadOS, the update badge has been moved to the upper ri ght corner.

If an update is available, access the App Store and click the Updates icon at the bottom of the screen. Apps can be updated one at a time or en masse by tapping the 'Update All' button. Updates are usually free.

Update an application:

1. In the App Store screen, tap the upade icon.
2. Tap 'What's New' to see information about the update.
3. Tap Update or the Update All button.

Updated December 15, 2019

Dropbox
Version 28.2, 84.3 MB
What's New ▾

OPEN
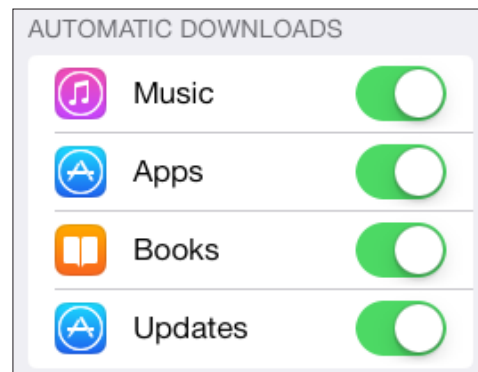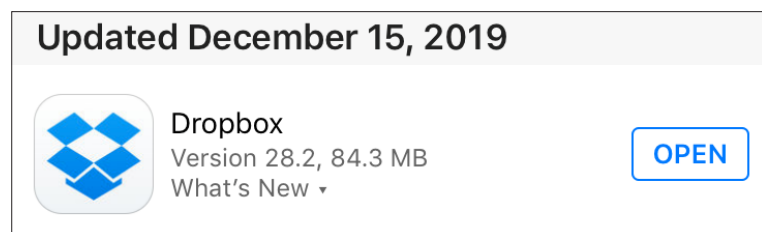
In System Settings, there is an option to automatically update apps.

Syncing with iTunes

When the iPad is connected to your computer and viewed in iTunes, the content of your iOS device can be backed up and synced. While this physical connecton (the USB charging cable needs to be plugged into your iOS device and your computer) was required in the past, this process has been simplified and augmented by the advent of the iCloud service.
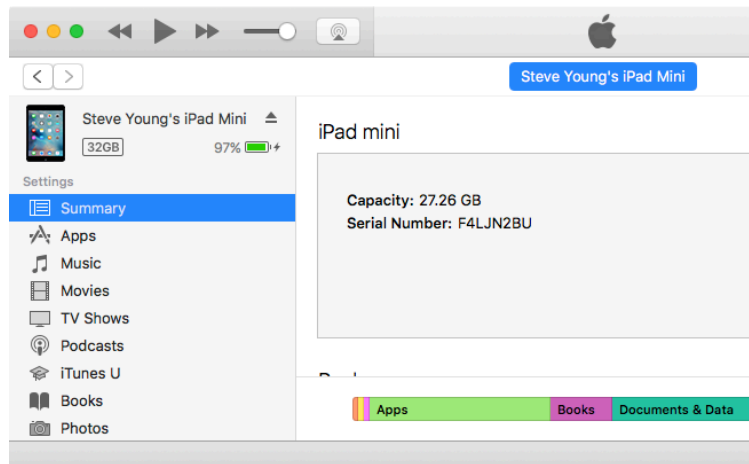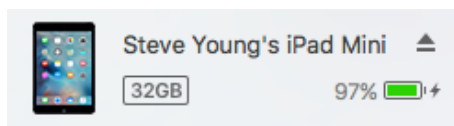
Purchases you make at the iTunes Store or the App Store are synced back to your iTunes library. You can also purchase or download content and applications directly from the iTunes Store on your computer and then sync them to your iPad.

You can set iPad to sync with only a portion of what's on your computer. For example, you might want to sync only certain music playlists, or only unwatched video podcasts.

IMPORTANT: You should be logged in to your own computer user account before connecting.

For more information, open iTunes and choose Help > iTunes Help. From the help screen, click on 'Sync your iPod, iPhone, or iPad'.

MacOS Catalina

The newest verion of the Macintosh operating system is 10.15, Catalina.

Catalina does away with the iTunes-iPad interface. All iPad syncing is done in the Finder, treating the iPad much like an external drive.
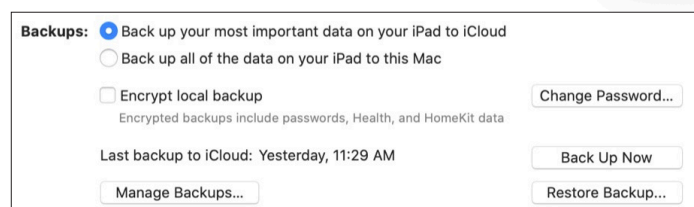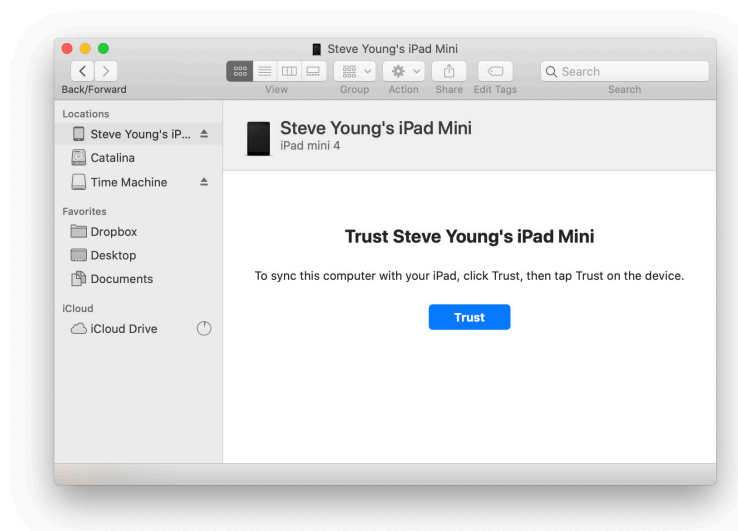
Syncing with iCloud

The iCloud service allows users to store data, such as music and iOS applications, on remote computer servers for download to multiple devices such as iPads, iPhones, Macs or Windows computers. It acts as a data syncing center for email, contacts, calendars, bookmarks, notes, reminders (to-do lists), iWork documents, photos and other data. The service also allows users to wirelessly back-up their iOS devices to iCloud instead of manually doing so using iTunes.

Since iCloud's introduction in 2011, each account receives 5GB of free storage. Additional storage can be purchased: 50GB for $0.99 per month, 200GB for $2.99 per month and 2TB for $9.99 per month.

The amount of storage is shared across all devices per each iCloud Apple ID. iCloud provides not only a way to sync data from iOS devices with a Mac or PC, but also a remote backup in case something should happen to your iPad; your information is safe and can be restored from iCloud.

With iCloud, certain types of data can be synced automatically between iOS devices (using the same Apple ID). As seen in the settings screen (viewed by tapping the Settings app), iCloud syncing can be turned off or on independently for a number of apps.

I use iCloud with my Calendar app, along with Pages, Keynote and Numbers - I change a document on my iPad, and the next day, if out and about, I can check it on my iPhone. When I paste in some text to the Notes app on my iPad, the same notes appear on my Mac. There are also web versions of Pages, Numbers and Keynote which run on Windows computers and Chromebooks.

To access the iCloud service on your browser, type in www.icloud.com and enter your Apple ID and password.
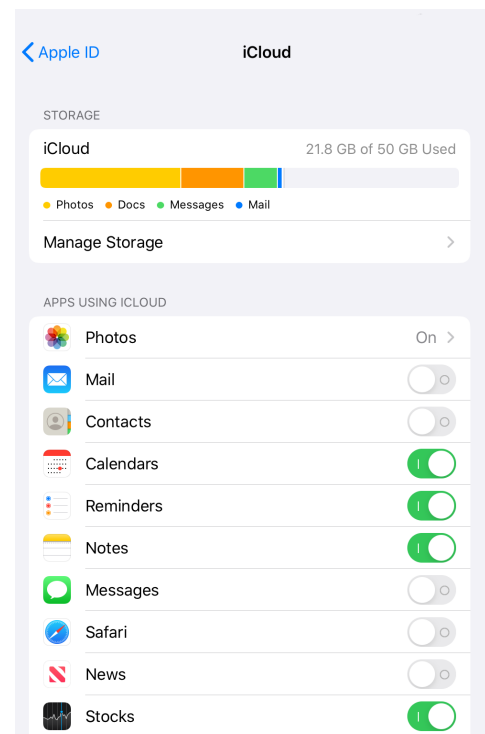
Tips and Tricks   (there may be slight variations depending on the version of iPadOS)

The iPad is very intuitive to use, but contain some little-known shortcuts. Here are some of my favorite time saving and useful functions.

Customizing the Home Screen

You can customize the layout of icons on the Home screen, including the Dock icons along the bottom of the screen. If you want, arrange them over multiple Home screens.

Rearrange icons:

1. Touch and hold any app's icon until all the icons begin to jiggle.
2. Arrange the icons by dragging them to their desired position.
3. Press the Home button ⬜ to save your arrangement, or cancel the operation.

Create additional Home screens: While arranging icons, drag an icon to the right edge of the screen until a new blank screen appears. You can flick to return to the original screen and drag more icons to the new screen. Sometimes it takes a couple of tries (and a lot of patience!).
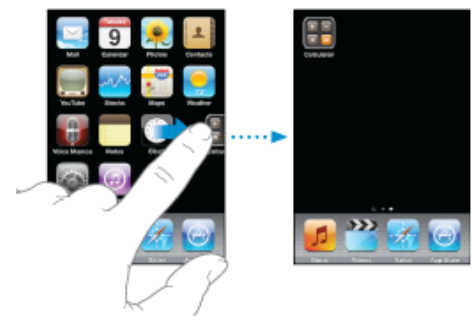
There can be up to 11 Home screens on both the iPad and iPod Touch. The number of dots above the Dock shows the number of screens you have, and indicates which screen you're viewing.

Switch to another Home screen: Flick left or right, or tap to the left or right of the dots.

Go to the primary (first) Home screen: Press the Home button.

Reset your Home screen to the default layout: Choose Settings > General > Reset and then tap on Reset Home Screen Layout.

1. Touch and hold any app's icon until all the icons begin to jiggle.
2. Drag a Dock icon away from the Dock, leaving an 'empty' spot.
3. Drag the desired app icon onto the Dock.
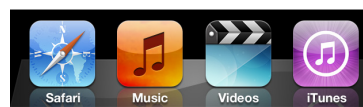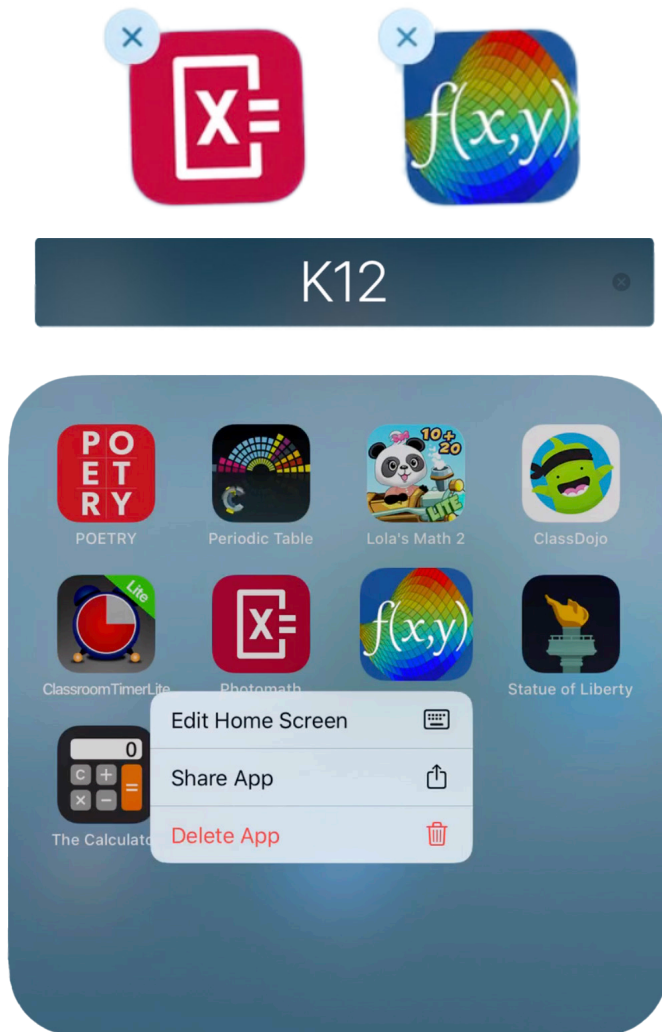

Original icon in Dock
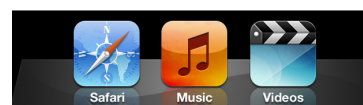
One icon removed
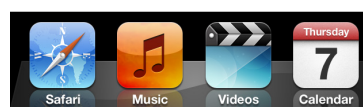
New icon in place

Organizing with Folders

With the introduction of iOS 4 in 2010, iPads gained the ability to create folders. Folders let you organize icons on your Home screen; for example, you can create a folder just for math apps, another for games, another for science, etc. You can have a total of 135 apps in a folder (9 apps per page and 15 pages per folder). Folders are automatically named when you create them, based on the initial icon you use to create the folder, but you can change the name any time you want. Like individual icons, folders can be rearranged by dragging them around the Home screen. Folders can be moved to a new Home screen or to the Dock.

To create a folder, touch and hold an icon until the screen icons begin to jiggle, then drag the icon onto the top of another icon. A folder is created, including the two icons, and shows the folder's name. You can tap the name field and use the keyboard to rename the folder.

When you finish organizing your Home screen, press the Home button to save your changes.

Some applications, such as Mail and the App Store, display a badge on their icon with a number (to indicate incoming items) or exclamation mark (to indicate a problem). If these applications are contained in a folder, the badge appears on the folder.

A numbered badge shows the total number of items you haven't tended to, such as incoming email messages and updated apps to download.

An exclamation mark indicates an alert with an application in the folder.

Folders are a great way to keep your device organized. For example, here several K12 educational apps, that have been placed into a folder, which is labeled K12. In the same way, similarly themed apps (News, Literature, Math) can be conveniently placed together.

Note that the same proceedure (touch-hold) an icon gives you the option of deleting an app, along with all its data.

Open link in new window in Safari

Pressing and holding a link in Safari offers a few choices: Open, Open in New Page, Add to Reading List, Copy and share. This is essentially the same as opening a link in a new tab on the desktop version of Safari. You can also get some information about where a link will take you before you actually click on it; text at the top of the window gives you the exact URL it targets.

Open in New Tab	⊞
Download Linked File	⊕
Add to Reading List	∞
Copy	⧉
Share...	⬆
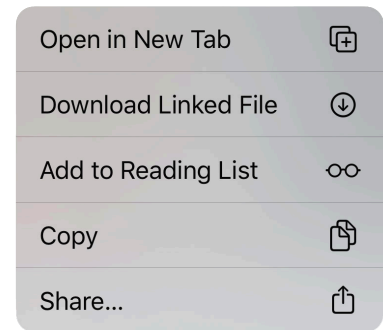
Predictive typing

The iOS keyboard includes **predictive typing** - the iPad tries to stay one step ahead of your thinking by displaying three words which might come next (or completes a partially typed word). If you see the word you want displayed, tap it to place it into your text. Tap and hold the emoticon button to turn predictive text off and on.
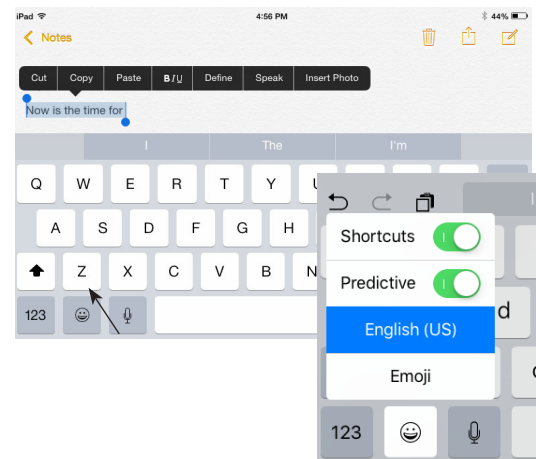
Keyboard advancements

Pressing and holding down the period "." button brings up buttons for .us, .net, .edu, and .org.
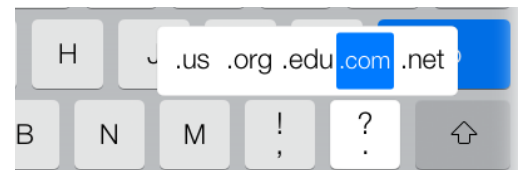
Requesting a Desktop website.

Often, web designere will create two verisons of their site, one for full size computer and laptop screens and a simper verison for handheld devices. In Safari, you will see the scaled-down version of websites. Tapping the Change Text icon will reveal a menu wherein you can requst the 'main' version of a given website.
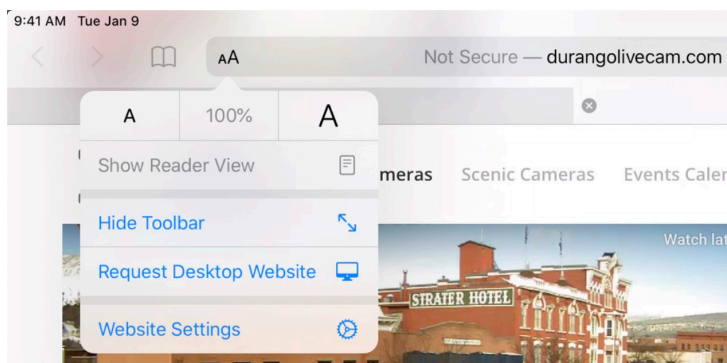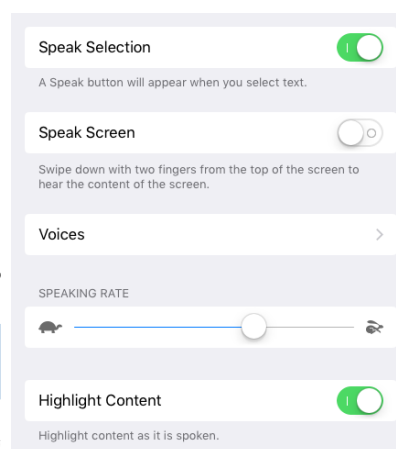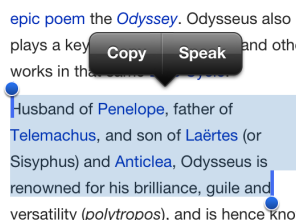
Scrub media at your own pace

Scrubber

While viewing media (music, videos, audiobooks, pod-casts, etc.), there is a line which marks the current lo-cation of the playhead that can be dragged horizontal-ly to rewind or fast-forward. The act of quickly moving through a video or audio is called **scrubbing**. As you move your finger to rewind/fast-forward, you can also drag it up and down (which still dragging horizontally) to change the speed at which it scrubs. The lower you scrub the screen, the slower the scrubbing.
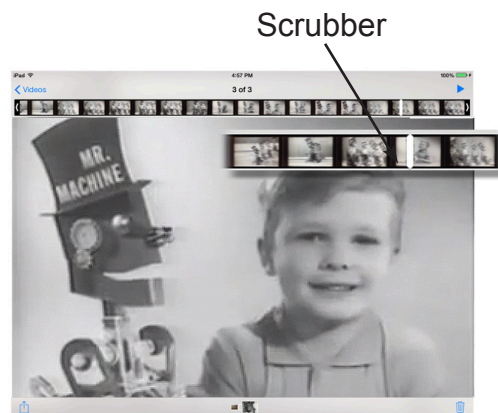
Speak Selected Text

Enabling the Speak option makes it possible for your iOS de-vice to read aloud any selectable text. Launch the Settings app, tap on General, and then choose Accessibility. Scroll down to Speech, and turn it on. To select text, touch and hold a word - a selection rectangle will appear. Move the control dots to ex-pand the selection as desired. Tap the 'Speak' option in the menu.

epic poem the *Odyssey*. Odysseus also plays a key ... and oth-works in th...

Husband of Penelope, father of Telemachus, and son of Laërtes (or Sisyphus) and Anticlea, Odysseus is renowned for his brilliance, guile and versatility (*polytropos*), and is hence kno

Keyboard shortcuts

In Settings > General > Keyboard you can enable a num-ber of keyboard shortcuts to make typing a little easier. You can turn on Auto-Capitalization (which takes effect when starting a new sentence), Caps Lock (double tap the Shift button on the keyboard), and the "." insert peri-od shortcut (double tap the space bar or press the space bar once with two fingers to automatically insert a period then add a space).
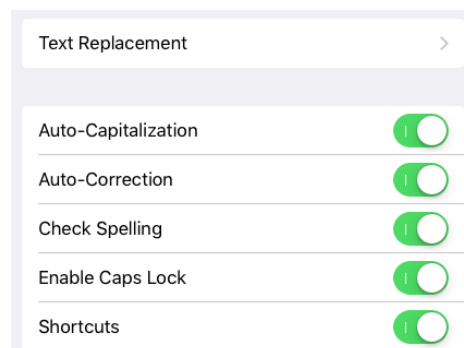
Web Clips

The Safari web browser lets you add a webpage to your home screen. When viewing a web page, press the export button to bring up the option screen. When you click 'Add to Home Screen', it will remember your exact position on the web page and automatically gen-erate a thumbnail icon that appears on your home screen.
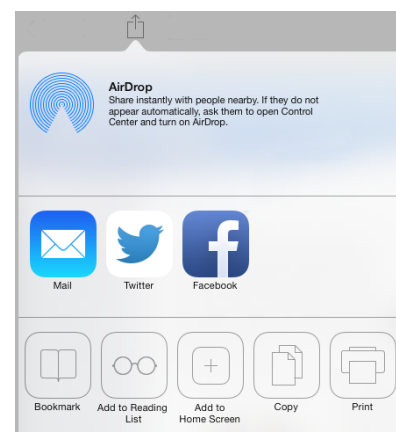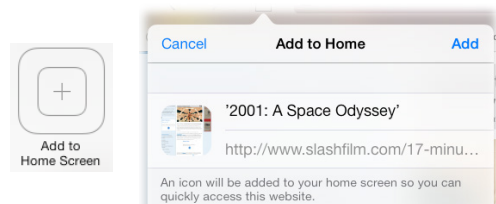
**Instant scroll to the top**

If you're in an application that requires you to scroll a lot (like a long web page in Safari) it can be tiresome to make your way back to the top - that is, unless you give a quick tap to the status bar (where the clock and battery indicator are). This will automatically bring you right back to the top of whatever screen you're on.

Two finger scroll

When you're viewing a frame or large text box on a web page in Safari, you might notice that scrolling with one finger moves the entire page, not the content within that frame or box. To avoid this, use two fingers to scroll within the box and the containing page will stay stationary.

Move the text insertion point

While typing you may realize you made a typo and need to go back to fix it. No problem! Press your finger to the screen over the character you want to change; a magnifying glass will appear to help you see where the cursor is.
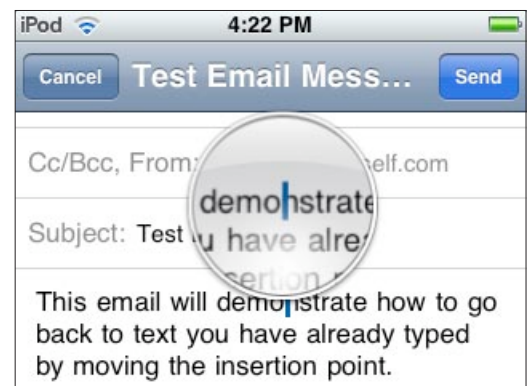
Close apps and return to a Home Screen

To quickly close an app, place all five fingers on the screen, spread apart. Slide all fingers together to a central point, in a kind of grabbing motion. This action will instantly close the app.

Switch from app to app

Using four (or five) fingers, swipe left or right to switch from one active application to another.

Enable parental controls

Those of us (parents and teachers) who want to keep our young technology-users from doing anything potentially questionable on a device can turn on Parental Controls by going to Settings > General > Enable Restrictions, then choosing which functions to disallow, such as listening to explicit music, browsing YouTube, and more. You will need to set a special passcode, making it impossible to get around the restrictions, unless or until the passcode is entered.
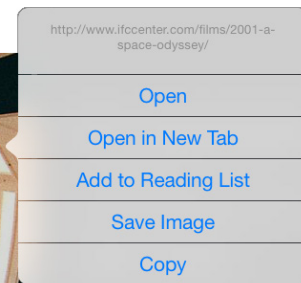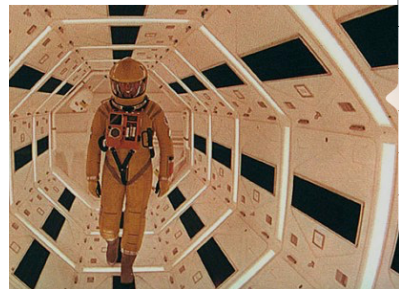
Search a web page

Typing in the address box in Safari now offers users the ability to search for text within the currently-open page, displaying a toolbar at the bottom of the screen to allow for navigation among instances of the term.

On This Page

Find "alice"

∧ ∨ 1 of 23 matches   🔍 alice
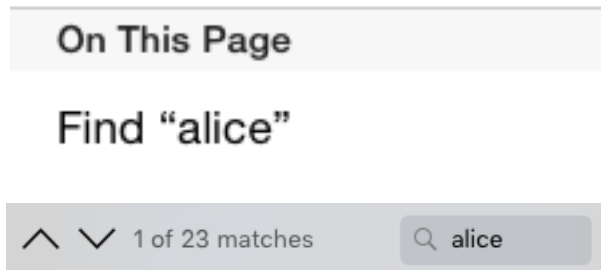
Saving web images

If you find an image on the internet that you want to save, simply touch the image; after one second a series of choices appear. Tap the Save Image button and the photo is saved to the Photo app. You can also copy the image and paste it in to an email.

http://www.ifccenter.com/films/2001-a-space-odyssey/

Open

Open in New Tab

Add to Reading List

Save Image

Copy

Screenshots

One of the 'coolest' features is the ability to take Screenshots of whatever you are doing on your iPad. To do so, press the Sleep and Home buttons at the same time; a white flash will display on the screen. To view your screenshots, go to the Photos application.

Just as with other pictures in the Photos app, screenshots can be emailed to other users, printed, transferred or posted online. Tap the 🔼 button to view the options.

You can also transfer these photos and screen shots from your iOS device to your laptop or desktop computer using the built-in software on your Mac or PC.
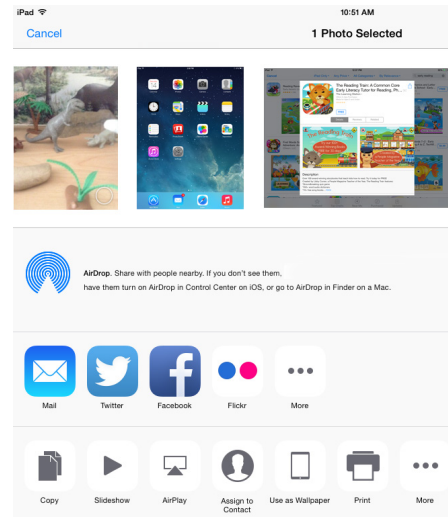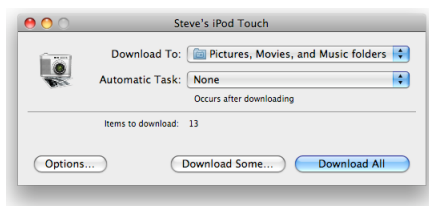
Image Capture

After connecting your iPad to your Mac with a USB cable, open the Applications folder and double-click the Image Capture program. It will automatically locate your device and present you with the option of downloading some or all the images (including movies). If you select the 'Some' option, you can then choose which files to transfer. The Windows Photo Viewer will do the same thing on your PC.
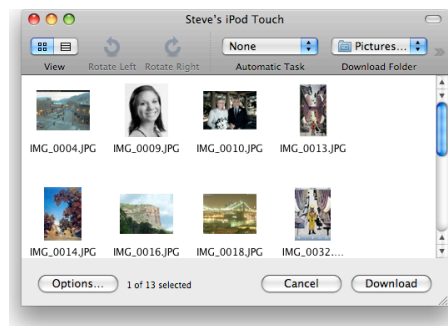
Transfer photos and movies to your PC

Windows will treat the iPad like a digital camera device, therefore any computer program that will sync to and from digital cameras to a PC can be used to transfer screen shots.

If you do not have a program that transfers pictures from digital cameras, you can use Window's Scanner and Camera Wizard to set up your PC to 'see' your iPad

1. Connect iPad to a PC using the USB cable
2. Click Start
3. Click All Programs
4. Select Accessories
5. Select Scanner and Camera Wizard

   Follow the steps to select your device and a location for the photos to be stored on your computer. From there, choose which photos you wish to transfer and click OK. You can then view the pictures with any image program.
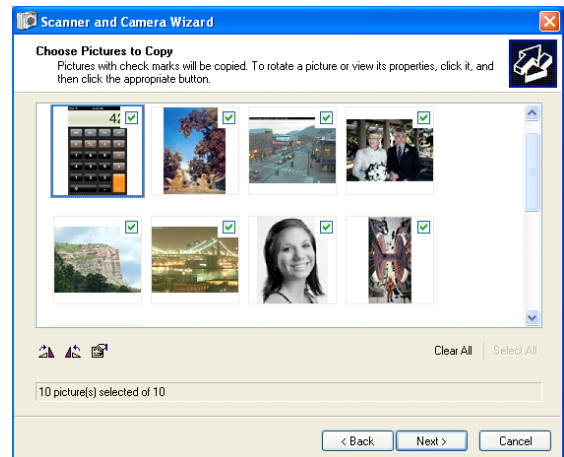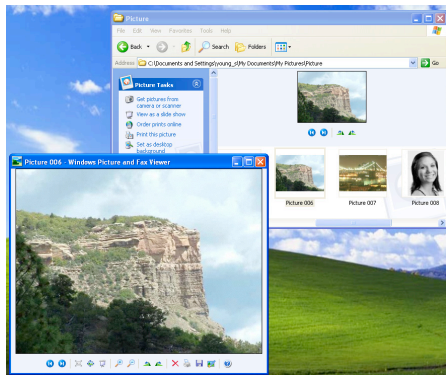
Clearing apps from memory

Double-clicking on the Home button will reveal the multi-tasking bar, showing the icons of all active apps. These icons are a 'listing' of all the apps that have recently been used. To remove these apps from memory (they will NOT be deleted and will still be available to re-launch) in iOS 7 or 8, simply drag the page image upward. In iOS 6, press an icon until it jiggles; then press the 'minus' icon.
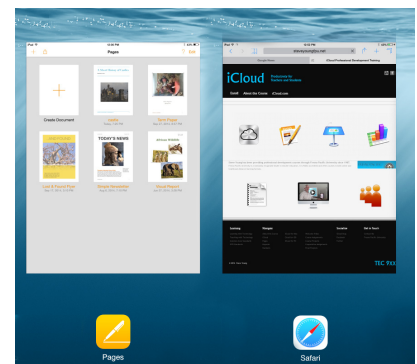
Working with Text in Books (Formally iBooks)
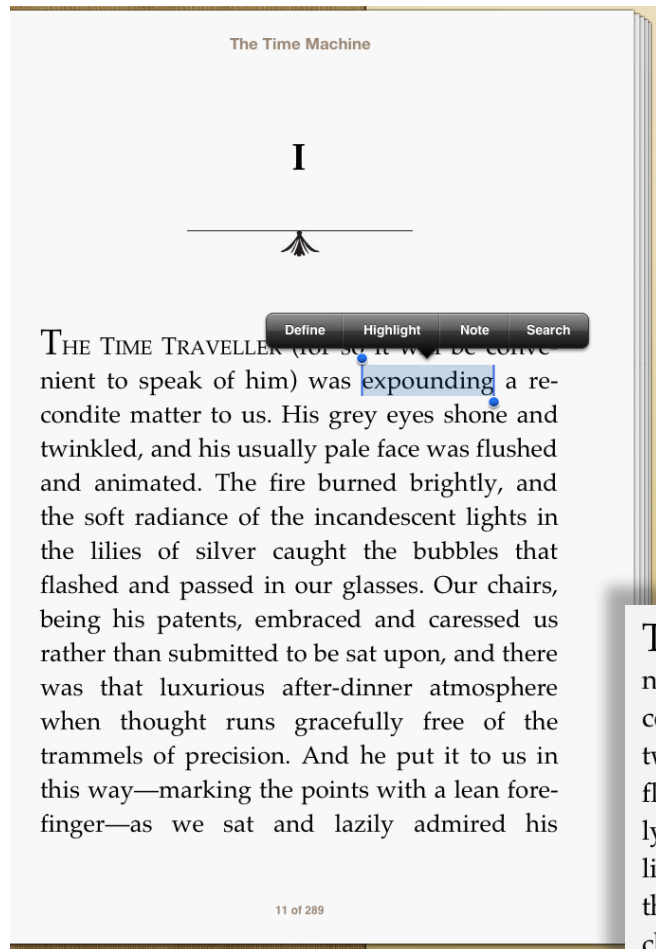
An iBook is Apple's term for an e-book (electronic, or digital book). Downloaded, stored and read inside the iBooks app, the printed page can now be an interactive experience.

Download and open any iBook (some free) into the iBooks app and touch a word; after a moment, a menu will appear with options to Define, Highlight, Note or Search. Phrases can also be selected for highlighting, searching, and notes.

Define a word
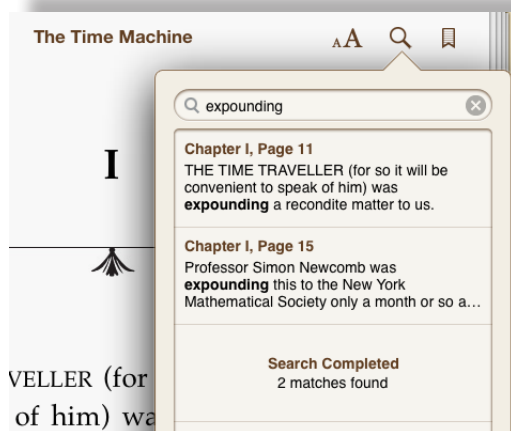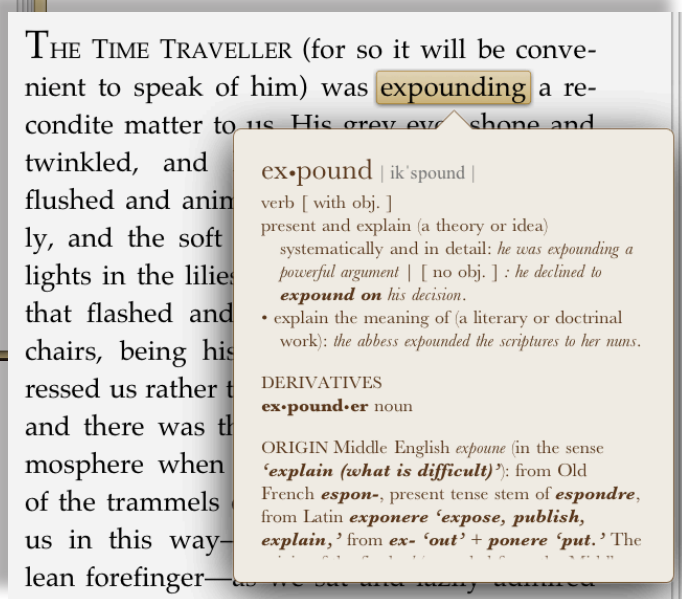
Add a note

Search the entire text for a single word or phrase. Tap the result to turn to that page.
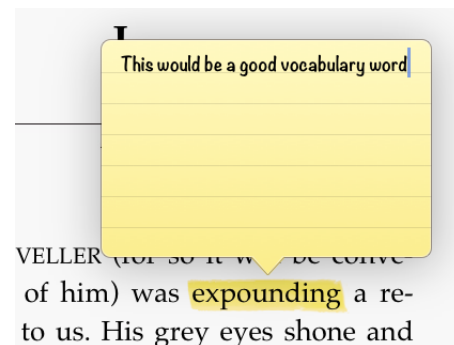
Adding .pdf's and web clippings to Books (Formally iBooks)

Portable Document Format (.pdf) is a common, almost universal format for storing / viewing documents. Both Mac and Windows computers can save files to this format. On the Internet, many documents (textbooks, novels, government documents, etc.) are available as .pdfs.
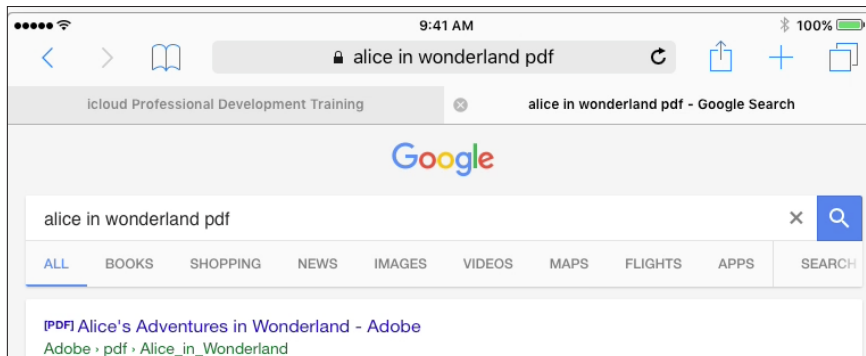
In Safari, locate a file in .pdf format (I did a Google search for 'Alice in Wonderland pdf'). Click on the link to load the .pdf in Safari. Once the .pdf is loaded, tap the 'Share' icon and then tap 'Books'.

You can also highlight section of text from a webpage to save as an Book.

The file will then be transferred to the Books app, and is available offline. Furthermore, you can search the file, place a bookmark, pull definitions from words, and copy passages to paste into other documents.
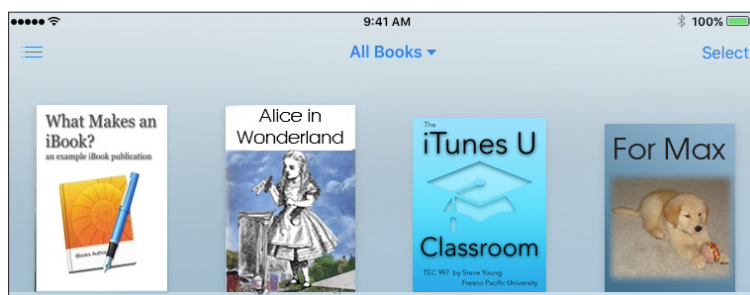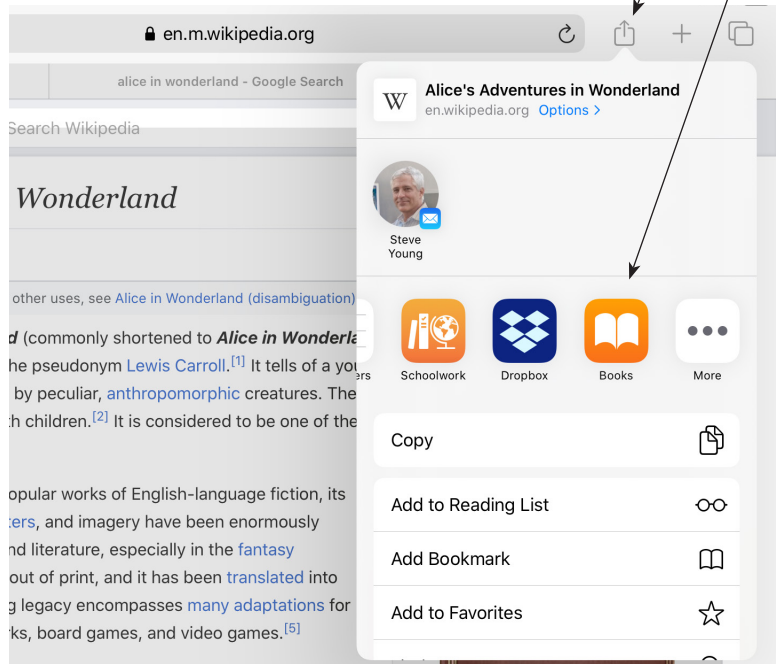
The new publication will take its place on the Books bookshelf in the PDF collection, where it remains until deleted. Simply tap on the book to open and read it anytime, offline.

Setting Up E- Mail Accounts

iPads work with Mail, Microsoft Exchange, and many of the most popular email systems. iCloud and Microsoft Exchange provide not only email, but contact and calendar information that can be synced to your iPad automatically, using WiFi. iCloud can also sync your bookmarks on your iPad with Safari on a Mac, or with Safari or Microsoft Internet Explorer on a PC. You can set up iCloud, Exchange, and other email accounts directly on an iPad.

iPad uses the Exchange ActiveSync protocol to sync email, calendars, and contacts with the following versions of Microsoft Exchange Server 2003 Service Pack 2 and Exchange Server 2007 Service Pack 1.

For many popular email accounts, iPad automatically enters most of the settings for you. If you don't already have an email account you can go online to get a free account from several providers. Try www.yahoo.com, www.google.com, or www.aol.com.

Set up an e-mail account:

1. From the iPad Home screen, tap Settings.
2. Tap "Mail, Contacts, Calendars," then tap Add Account.
3. Tap an account type:

    •   Microsoft Exchange
    •   iCloud
    •   Google email
    •   Yahoo! Mail
    •   AOL
    •   Other

4. Enter your current account information and tap Save.

    Your service provider or system administrator can provide the account settings you need.

    Exchange accounts: Enter your complete email address, domain (optional), user name, password, and a description. The description can be whatever you like.

    iPad supports Microsoft's Autodiscovery service, which uses your user name and password to determine the address of the Exchange server. If the server's address can't be determined, you're asked to enter it. (Enter the complete address in the Server field.) Once you connect to the Exchange server, you may be prompted to change your passcode to match the policies set on the server.

5. If you're setting up an iCloud or Microsoft Exchange account, tap the items you want to use on iPad - email, contacts, calendars, and bookmarks (iCloud only).

For Exchange accounts, you can set how many days of email you want to sync.

If you already have contact or calendar information on your device when you enable the account, the iPad asks what you want to do with existing information. You can choose to merge the existing data into your iCloud or Exchange account. If you don't merge the data, you can choose to keep it in a separate account or delete it. Existing bookmarks can only be merged or deleted.

Similarly, when you disable contacts or calendars in a iCloud or Exchange account, or if you delete an account, you are asked if you want to keep information or delete it.

You can add contacts using an LDAP (Lightweight Directory Access Protocol) account if your school or organization supports it.

You can subscribe to CalDAV or iCal (.ics) calendars.

Push Accounts

iCloud, Microsoft Exchange, and Yahoo! Mail are known as 'push' accounts - when new information is available, such as the arrival of an email message, the information is automatically delivered (pushed) to the iPad.

In contrast, "fetch" services require your email software to periodically check with your service provider to see if new messages have arrived, and then request them to be delivered.

iCloud and Exchange also use 'push' to sync your contacts, calendars, and bookmarks (iCloud only) if you have those items selected in the account settings.

Synced information is transferred automatically over your wireless connection; you don't need to connect to your computer to sync. iPad can receive pushed data over a WiFi connection only when the device is awake (the screen is on, or when it is connected to your computer or a power adapter).

Find My iPad

iCloud includes the Find My iPad feature that helps you locate device if it's been lost or stolen and remotely lock, set a passcode, or erase the information if necessary. See Security Features.

If you enable Find My iPad for your iCloud account, make sure that Push is turned on for Fetch New Data. In Settings, choose "Mail, Contacts, Calendars" > Fetch New Data, and if Push is off, tap to turn it on.

Accessories

As with most successful products, a whole industry has built up supplying accessories for the iPad. Some are practical and some purely cosmetic (a diamond-encrusted iPhone case comes to mind!). Here are some worth considering:

Stands

The iPad is meant to be held, but sometimes that is not possible. iPads are used as teleprompters, scoreboards and by musicians for reading sheet music. Having a specialized stand made for iPads can be very useful.

Screen Shields

Specially-designed for the front "screen" of the iPad, a self-adhering, protective, plastic film shields the screen from dust, dirt, and minor scratches. These shields are sometimes included with a case or can be purchased separately.

Microphones

Even though iPads come with built-in microphones, sometimes a separate, hand held mic is more useful. Many are available, including the high quality iRig Mic. It is suitable for speech and music recording, as well as recording the audio portion of a video recording session.

Accessories (continued)

Apple Digital AV Adapter (HDMI)

The Apple Digital AV Adapter for the iPad mirrors exactly what you see on your iPad. Mirroring means that the same image will be seen on both screens - the iPad and the television / video projector. The connection is HDMI, compatable with high definition televisions and newer model video projectors. HDMI also carries digital audio to screens that support it. A second built-in connector allows charging the iPad while it's mirroring for unlimited presentations.

The **iPad Keyboard Dock** combines a dock for charging your iPad with a full-size keyboard, which includes special keys that activate iPad features. The dock has a rear connector, which lets you connect to an electrical outlet using the USB Power Adapter and sync to your computer.

iPad covers and cases come in a variety of styles and prices. For the iPad 2, Apple introduced a magnetically latched soft cover to protect the screen. Other companies offer more protective cases, which enclose the iPad in plastic, silicone, leather or metal. The iPad is designed to be handled, but like other devices (especially those with large pieces of glass), it is not made to be dropped onto a hard floor. A simple snap-on plastic case is a good investment, especially if the iPad is going to be used by students.

Classroom and Lab Management

A company named Bretford offers solutions to carry, secure, sync, and charge 10 iPad devices at a time. Here is the manufacturer's blurb:

"Neatly store and charge up to 10 iOS devices, keeping your technology tools charged, organized, and ready to go when you are."

These cases are pretty expensive, but worth a look.

Bretford publishes an iBook covering many aspects of iOS management; for I.T. managers preparing for schoolwide deployment, it is an excellent resource. Find it by searching for the keyword 'Bretford' at the iBooks store or in the Books section on iTunes.

iPad Security

WiFi Authentication
Test out your school's WiFi network to make sure the iPad can connect. The network should be password protected to deter unauthorized access.

Web Filtering
When handhelds are connected to a school's filtered WiFi network, the Internet is filtered on the device. That means that if a site is blocked at school on a desktop computer, that site is also blocked on your iPad.

Set up an Inventory System
Barcode or label each iPad and establish a check-out and check-in system that is followed by everyone.

Buy cases for all iPads
They add a bit to the cost, but one dropped iPad saved by its case pays for twenty other cases.

Establish Rules that are followed
On the course website are some sample Terms of Use Agreements and classroom management ideas - check them out!

Apple iPad Learning Labs

An Apple iPad Learning Lab streamlines the management of classroom sets of iPad devices. Each lab includes 10 iPad devices and a sturdy and secure mobile cart. The cart can store, charge, and sync up to 30 iPads and has room for a Mac Book computer. The cart rolls easily around campus so multiple classes can benefit, and it can be locked to secure the devices when they're not in use.

Apple iPod Learning Labs

An Apple iPod Learning Lab provides a simple and cost-effective way to manage multiple iPods in the classroom. Each lab includes 20 iPod Touch devices and a sturdy and secure mobile cart. The cart can store and charge up to 40 iPods, sync up to 20 iPods at a time to the same computer, and store up to four Mac Book computers, as well as iPod accessories. For even more iPod portability, the Bretford Power-Sync Case (see previous page) organizes, charges, and syncs up to 20 iPod devices and keeps them securely stored in a durable hardshell case.

For more information on the Apple Learning Labs, go to:

https://www.apple.com/education/docs/iOSLearning_Solutions_20120426.pdf

You can link to this page via the course website.

Volume App Purchases

The Volume Purchase Program makes it easy for schools to purchase iPad apps in volume. The Volume Purchase Program also allows app developers to offer special pricing for purchases of 20 or more.

Purchase Volume Vouchers

Volume Vouchers can be purchased at the Apple Store for Education in denominations of $100, $500, $1000, $5000, up to $10,000.

These vouchers can be purchased on behalf of the school by an Authorized Purchaser, and purchase orders are accepted.

Schools can then designate one or more 'Program Facilitators' to redeem Volume Vouchers and purchase apps through the App Store Volume Purchase Program.

The Program Facilitators may be anyone chosen by the Authorized Purchaser - for example a school principal, technology coordinator or teacher, or the Authorized Purchaser may fulfill this role.

For more information, go to:

https://volume.itunes.apple.com/us/store

As with most all software, a license must be purchased for each device on which an app is installed. To read the Apple End User Agreement, go to:

http://www.apple.com/legal/itunes/appstore/dev/stdeula/

The Apple Education webpages are a good place to start when thinking about iPod Touches in quantity. While the educational pricing is no lower than the retail price, Apple puts everything together nicely. For more information go to: **www.apple.com/education/it/**
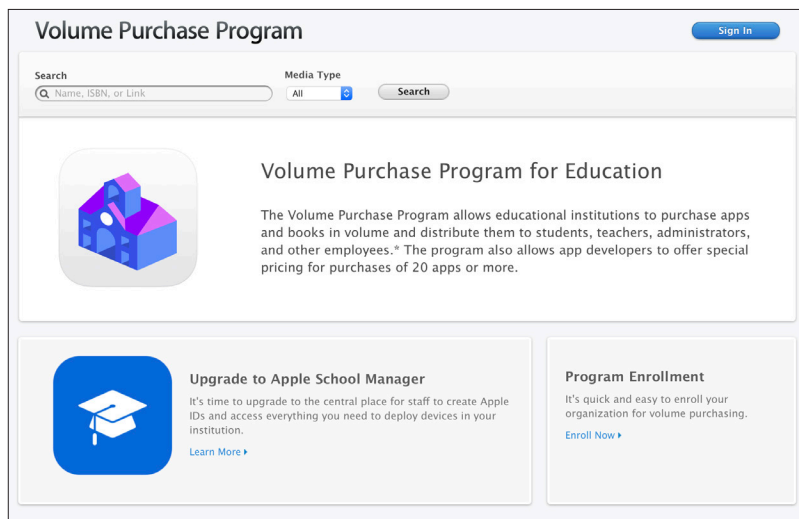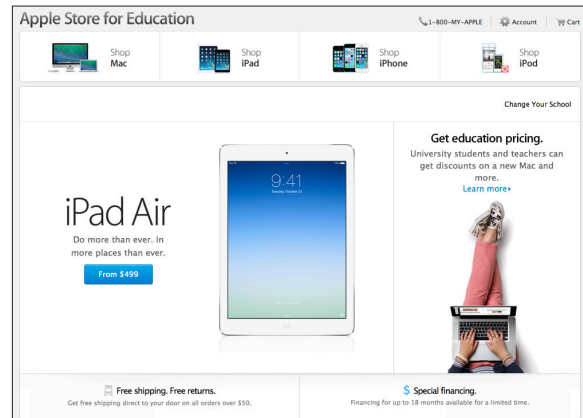
Assignment 3: Learning with the iPad Simulator

As you learn the functionality of the iPad simulator and immerse yourself in the device and its uses in the classroom, use the chart below to keep track of your progress. You will, no doubt, spend several hours exploring the different apps, judging their potential for use in your class-room. The apps are representational of the larger number of apps available. For some of you, this will be your first experience seeing apps; some of you may already own an iPhone or iPad. Regardless, please take the time to explore the apps and watch the videos - they will be the basis for not only this assignment, but others to follow.

You will find the first three items on the checklist under the 'Videos' heading.

iPad Video Checklist

Videos
Education with iPad
Apple iPad Commercial
iPad News Story
Student Perspective
iTunes U

I have:

- [ ] Watched the Local TV news story
- [ ] Watched the student perspective video
- [ ] Watched the iTunes U video
- [ ] Clicked on each of the Home Screen and Apple apps and watched the demonstrations
- [ ] Clicked on each of the Apple apps and watched the demonstrations
- [ ] Clicked on each of the Teacher apps and watched the demonstrations
- [ ] Clicked on each of the Early Learner apps and watched the demonstrations
- [ ] Clicked on each of the Elementary apps and watched the demonstrations
- [ ] Clicked on each of the Reference apps and watched the demonstrations
- [ ] Clicked on each of the Language Arts apps and watched the demonstrations
- [ ] Clicked on each of the Social Studies apps and watched the demonstrations
- [ ] Clicked on each of the Math and Science app and watched the demonstrations
- [ ] Clicked on each of the Health - P.E. apps and watched the demonstrations
- [ ] Clicked on each of the Art - Electives apps and watched the demonstrations
- [ ] Clicked on each of the Special Needs apps and watched the demonstrations

This is an 'on your honor' assignment; as such, there is nothing to return. You will be reflecting on some of the results of your exploration in assignment #4, 'Instructor Contact' via a web form. For an online listing of all the apps on the simulator, go to **steveyoungfpu.net/simapps.html**

Assignment 4: Instructor Contact

After reviewing the apps on the simulator, I'd like to hear from you by way of completing a brief survey. To access the survey click the "Assignment 4" link in the "PDF Forms"column on the course website. Your completed survey will be e-mailed to me. Once read, your entries will be transferred to your record in my student database, documenting completion of the assignment.

Please don't forget to include your name!

TEC 964 Midcourse Survey

iPads and iPod Touch in the Classroom

Your full name

Your answer

Email address

Your answer

Please note: This task will be weighted the same as other assignments in the course. I am expecting a thorough reply to the prompt at the end of this survey. The intent is for you to write a narrative relating your thoughts and ideas for the use of iPads / apps in the classroom, both generally and as it relates to your specific situation.If you are filling out this form using the iPad Simulator, do not click the 'Close Browser' button; all responses will be lost.

☐ Got it!

Which introductory video did you find most useful?

Choose ▾

Which introductory video did you find least useful?

Choose ▾

Do you find the instructions in the workbook clear and understandable?

☐ Not at all

☐ Somewhat

☐ Yes

☐ Very much so

☐ Other:

Generally, did the workbook provide enough information to complete the assignments?

☐ Yes

☐ No

☐ Other:

Comments and ideas concerning the use of iPads / Apps in your classroom?

Your answer

I am interested in hearing your thoughts as you looked at the apps - how could you use a particular app in your classroom? What did you like or dislike about a certain app? Any comments to offer?

At the end of the survey click the Submit button; your responses will automatically be emailed to me. **There is nothing you need to print out and return.**

I have already made several changes to the course based on student input so I do listen and certainly respect and consider what you have to say. Thank you, in advance, for your comments and suggestions!

If you are having difficulty accessing the survey through the simulator or if you wish to access the survey on your computer's web browser, you may do so by entering the following URL:

www.steveyoungfpu.net/ipod_survey1.htm

As with other assignments in the course, this one is weighted (worth up to 10 points). Please consider that when completing the form. I expect thorough, thoughtful replies to the narrative questions at the end of the survey; an irrelevant, 'one-liner' will not suffice (if your survey responses are inadequate, expect me to contact you and request a re-do). Again, remember to include your name on the survey.

Thanks!

The App Store

Part of the iPad is the App Store. As described earlier, the App Store is part of what is called the 'Apple Ecosystem'. This means that Apple has control (for better or worse) over every app which is available to install onto your iPad. A software developer submits an app to Apple, and it is reviewed for bugs, computer viruses, and other unwanted qualities. Apple either rejects the app or allows it to be posted on the App Store.

Only approved apps appear on the App Store, and only Apple Devices can run those apps. Most software developers created different versions of their app to run on other devices (i.e. Android or Chrome).

The App Store has tens of thousands of apps, divided into categories. Each app has a description from the publisher as well as customer ratings and user reviews. These can be very helpful when searching for just the right app.
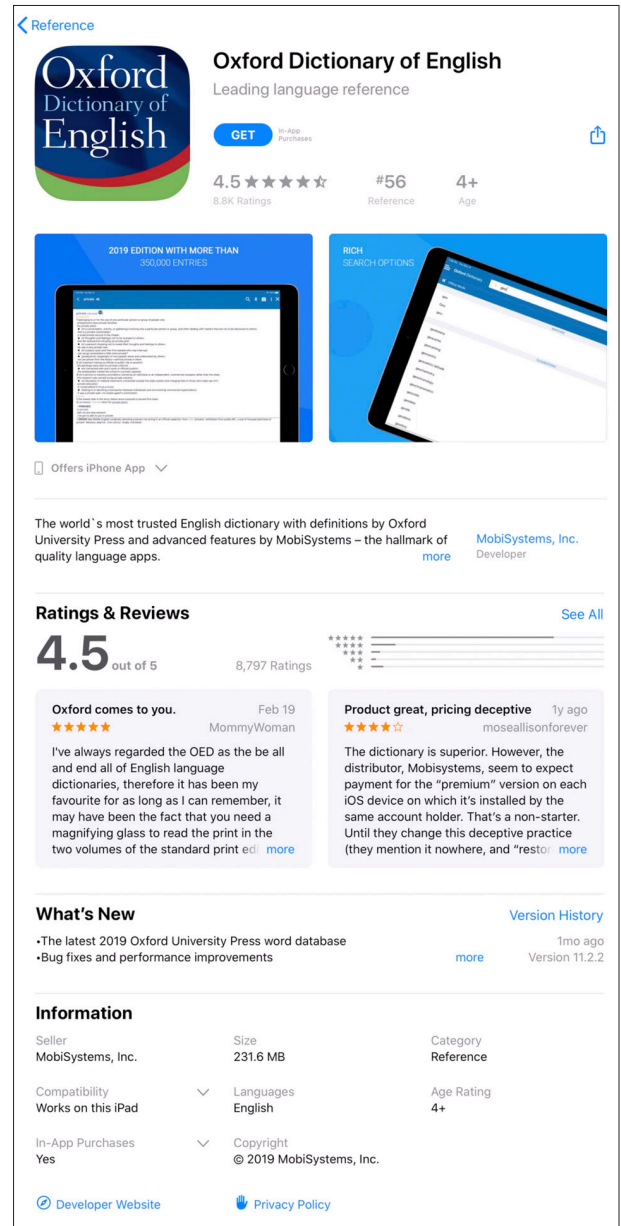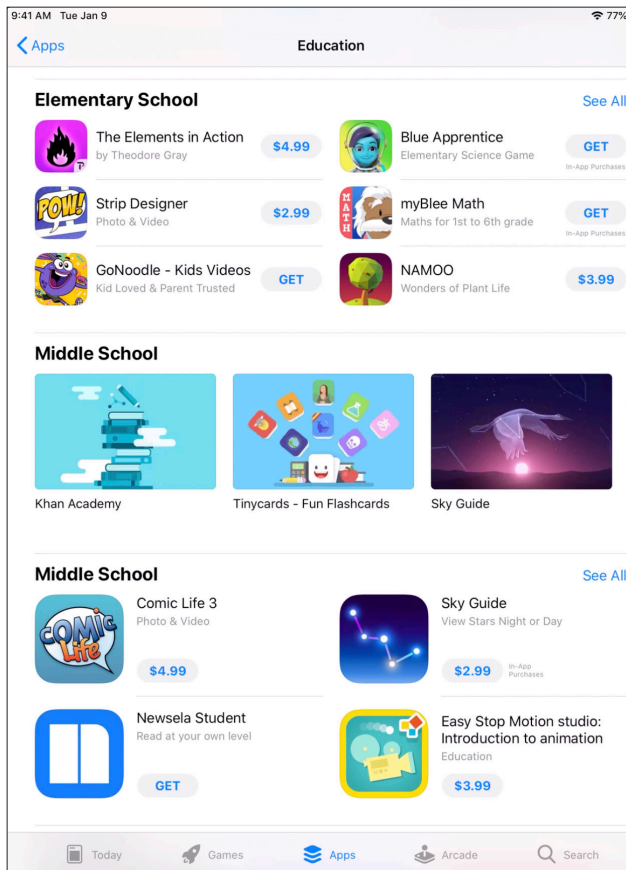
In-App Purchases

As mentioned eariler, most of the apps on the iPad Simulator are free, but as we know all too well these days, 'free' does not always *mean* 'free'. **In-app purchases** allow the publisher of an app to offer additional content and functionality *for a fee*. When looking for apps, be mindful of the implication of 'Offers In-App Purchases'.

Many 'free' apps also may have 'banner ads', which appear on-screen on a permanent or temporary basis. For a fee the ads can 'disappear'. If you like the app but don't wish to pay the fee, learn to ignore the ads (and teach your students not to tap on them!).
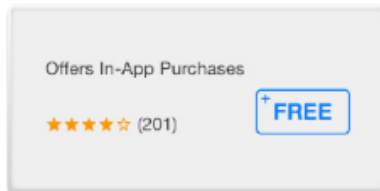
The Reading Train: A Comm
Early Literacy Tutor for Read
The Learning Station >
Offers In-App Purchases
Made for Ages 5 and Under
☆☆☆☆☆

FREE

Below is the text from the Apple Store concerning in-app purchases:

Offers In-App Purchases
★★★★☆ (201)   ⁺FREE

What Are In-App Purchases?

Many free and paid apps offer In-App Purchases—optional transactions designed to augment an app's functionality. You can only make In-App Purchases from an app that you've already downloaded. To find out if an app offers In-App Purchases, refer to the app's product page, near the Buy or Free button.

Types of In-App Purchases

There are three types of In-App Purchases: permanent enhancements, like unlocking game levels, removing advertising, or expanding an app's feature set; expendable purchases, such as extra lives for a game character; and auto-renewing subscriptions (such as a monthly magazine that charges every 30 days).

Confirm Your In-App Purchase
Do you want to buy a
Pack of 20 Tokens for $1.99?

Cancel   Buy
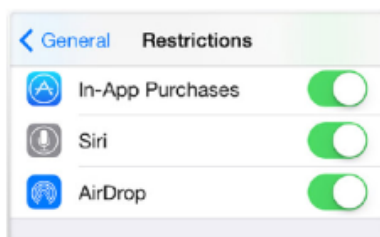
How In-App Purchases Work

‹ General   Restrictions

In-App Purchases
Siri
AirDrop

With iOS 4.3 or later, you must enter a password or use Touch ID (on a compatible device using iOS 7 or later) to make an In-App Purchase. If you use a password, additional In-App Purchases can be made without reentering your password for 15 minutes. To change your password settings to require entry with every purchase, open Settings, tap General, then tap Restrictions, and change Require Password. If you use Touch ID, it is always required with every purchase.

Explore the Apple App Store

One of the advantages of having an iPad is the built-in Apple App Store where you can search for just the right apps for you and your classroom. Browse through the apps and discover several which really spark your interest. If you do not have an iPad, click on the 'Apple App Store' link in the 'App Websites' column on the course webpage.

 * – WARNING: Exploring Apps may be addicting!

Use the form on the next page to record your findings for 3 'must have' apps you find at the Apple App Store.

App Store > **Education**   View Education in iTunes ▶

Books	A B C D E F G H I J K L M N O P Q R S T U V W X Y Z #
Business	**Popular Apps**
Catalogs	

Education

Entertainment

Finance

Food & Drink

Games

iTunes U	GoNoodle – Kids Videos	Sesame Street
Duolingo	Sight Words Learning Games & Rea...	Lingokids – English For Kids
Remind: School Communication	DMV Hub – Permit Practice Test	iClicker Reef
Photomath	Preschool! & Toddler kids learning ...	GRE Vocabulary Flashcards
Quizlet	ACT Photo	KidloLand Kids ABC Games Songs
Google Classroom	Drivers Ed	Kinedu: Baby Development Plan

If you have an iPad, be sure to check out iTunes U app.

Thus far the majority of you have reported this a definite favorite! They recently added a K-12 section with teacher and student produced media.

Assignment 5: Explore the Apple App Store

Interactive PDFs of this form are located on the course website.

App #1

Name of App

Cost

Short Description

How would you use this app in your classroom?

App #2

Name of App

Cost

Short Description

How would you use this app in your classroom?

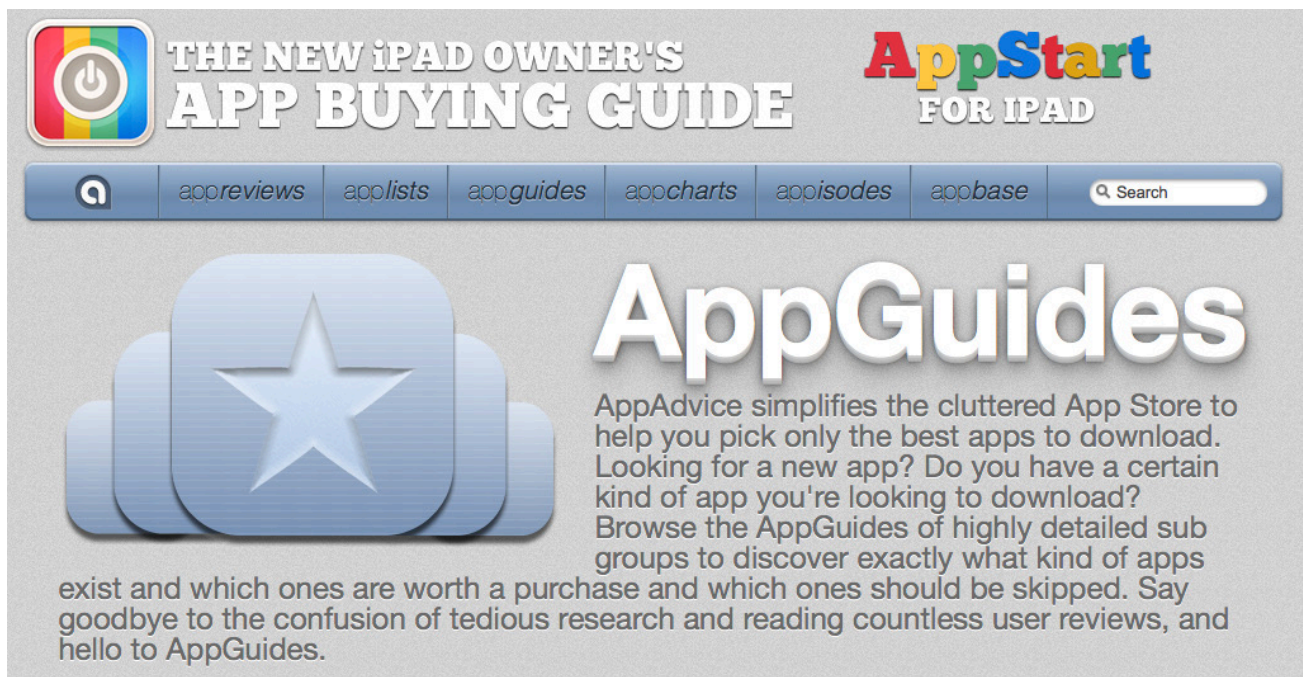
App #3

Name of App

Cost

Short Description

How would you use this app in your classroom?

Exploring App Websites

In addition to the Apple App Store, numerous 'third party' websites have emerged which do an excellent job presenting information on apps. On the next few pages are several such sites. In your web browser, go to the sites listed and explore the content of several curriculum-specific apps which you feel may be suitable for your students.

Use the form on page 66 to record your findings for three of the 'must have' apps you find on any of the sites.

Explore the appadvice.com   Website: *www.appadvice.com*

THE NEW iPAD OWNER'S **APP BUYING GUIDE**   AppStart FOR iPAD

appreviews | applists | appguides | appcharts | appisodes | appbase | Search

AppGuides

AppAdvice simplifies the cluttered App Store to help you pick only the best apps to download. Looking for a new app? Do you have a certain kind of app you're looking to download? Browse the AppGuides of highly detailed sub groups to discover exactly what kind of apps exist and which ones are worth a purchase and which ones should be skipped. Say goodbye to the confusion of tedious research and reading countless user reviews, and hello to AppGuides.

Education

Learning The Alphabet On Your iPhone

Fish Identifier Apps

Knot Apps

Spelling Study Aid Apps

Learning About Zoo Animals

Learning Fractions On The iPhone

Flashcard Apps For The iPad

Apps for Stargazing

Explore the Apps for Children with Special Needs Website:
www.commonsensemedia.org/guide/special-needs

Learning Differences & Special Needs Guide

Communication	Social Interaction	Organization	Reading & Writing	Math	Motor Skills

No matter which hurdles your kid faces, the apps and other media included in this guide can give him or her an added boost. We don't expect an app to be a complete solution, of course. Working with kids who face challenges requires lots of time, attention, and patience on the part of a parent, teacher, or other adult caregiver. Our goal is to offer you a host of fun, well-designed apps that were recommended and tested by field experts. We hope they can become a part of your toolkit as you work with your child.
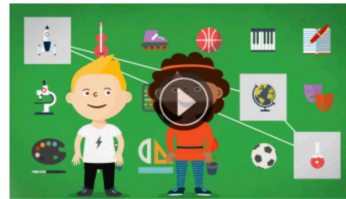
About this guide

Learn more about how to use this guide and the experts who helped build it.   Read more

How to use accessibility settings on your device

How to get tech into your kid's IEP

Video: Tips for Kids with Learning Difficulties

App Annie Website:
www.appannie.com/apps/ios/top/united-states/education/?device=ipad

Top Apps on iOS Store, United States, Education, Dec 19, 2016
Stay ahead of the market with Store Stats. Monitor the top apps across countries, categories and platforms.

In App Purchases All Apps ▾   Date Dec 19, 2016 ▾

iOS Store ▾   Device iPad ▾   Country United States ▾   Category Education ▾

	FREE		PAID		GROSSING	
1	Toca Hair Salon - Chris... — Toca Boca AB	FREE	Toca Hair Salon 3 — Toca Boca AB	$2.99	ABCmouse.com - Earl... — Age of Learning, Inc.	FREE / In App Purchases
2	Dr. Panda Toy Cars Free — Dr. Panda Ltd	FREE / In App Purchases	Sago Mini Puppy Pres... — Sago Sago	$2.99	Epic! - Unlimited Book... — Epic! Creations Inc	FREE / In App Purchases
3	Nick Jr. — Nickelodeon	FREE	Toca Life: Stable — Toca Boca AB	$2.99	Toca Hair Salon 3 — Toca Boca AB	$2.99
4	ABCmouse.com - Earl... — Age of Learning, Inc.	FREE / In App Purchases	Toca Kitchen 2 — Toca Boca AB	$2.99	PlayKids - Preschool C... — Movile Internet Movel S.A.	FREE / In App Purchases
5	Sago Mini Holiday Tru... — Sago Sago	FREE	Grandpa's Toy Shop — Fairlady Media	$2.99	NOGGIN - Preschool S... — Nickelodeon	FREE / In App Purchases

Educational App Store
A discovery marketplace for Educational Apps

Search over 3000 apps   **Search**

Home   About Us   Apps ▾   Games ▾   Teachers   Parents   Developers ▾   Login   **Sign Up**

TEACHERS

Keep your students engaged in the classroom

Try for free

PARENTS

Get your kids to learn
with the best educational apps

Try for free

IXL Maths Practice

• Reception   % Year 4   ≈ Year 8
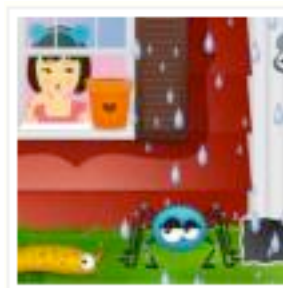✏ Year 1   🍎 Year 5 x^2 Year 9
+ Year 2   ≤ Year 6   △ KS4
∞ Year 3   ✏ Year 7   Σ KS5

Try IXL Maths Practice Questions

Try 10 **FREE**
practice questions!

Practise now

Best Apps for Schools 2020: For Teachers and Students

www.educationalappstore.com/app-lists/best-apps-for-schools

welcome to

Best Kids Apps

Itsy Bitsy Spider

takes the song your toddler
knows and loves and adds
new characters to create a
fun, multi-paged, musical
activity book. If you already
have Wheels on the Bus and Old MacDonald ..

Explore bestkidsapps.com Website: *www.bestkidsapps.com*

Links to these sites can be found in the 'App Website' column of the course website.

Assignment 6: Explore App Websites

In your browser, enter the web addresses listed on the previous pages and explore the content of curriculum-specific apps which may be suitable for your students. Use this form to record your findings for the 3 'must have' apps you find. Interactive PDFs of this form are located on the course website.

App #1

Name of App

Website where found

Cost

Short Description

How would you use this app in your classroom?

App #2

Name of App

Website where found

Cost

Short Description

How would you use this app in your classroom?

App #3

Name of App

Website where found

Cost

Short Description

How would you use this app in your classroom?

Teacher Tools

There are countless apps available for teachers - grade books, remote clickers, attendance programs, to name but a few categories. Come report card time, the tool I used most often was the calculator! (There are several apps for that now.) If your explorations do not lead you to many teacher apps, a few are shown below.

Your course website contains several files, located in the Teacher Tools folder of the Resources folder, with video presentations of a few of the many teacher tool apps available. The folder also contains links to websites which specialize in teacher apps.

Percentage

Description

This percentage calculator helps to find the proportion between two values expressed in percent.
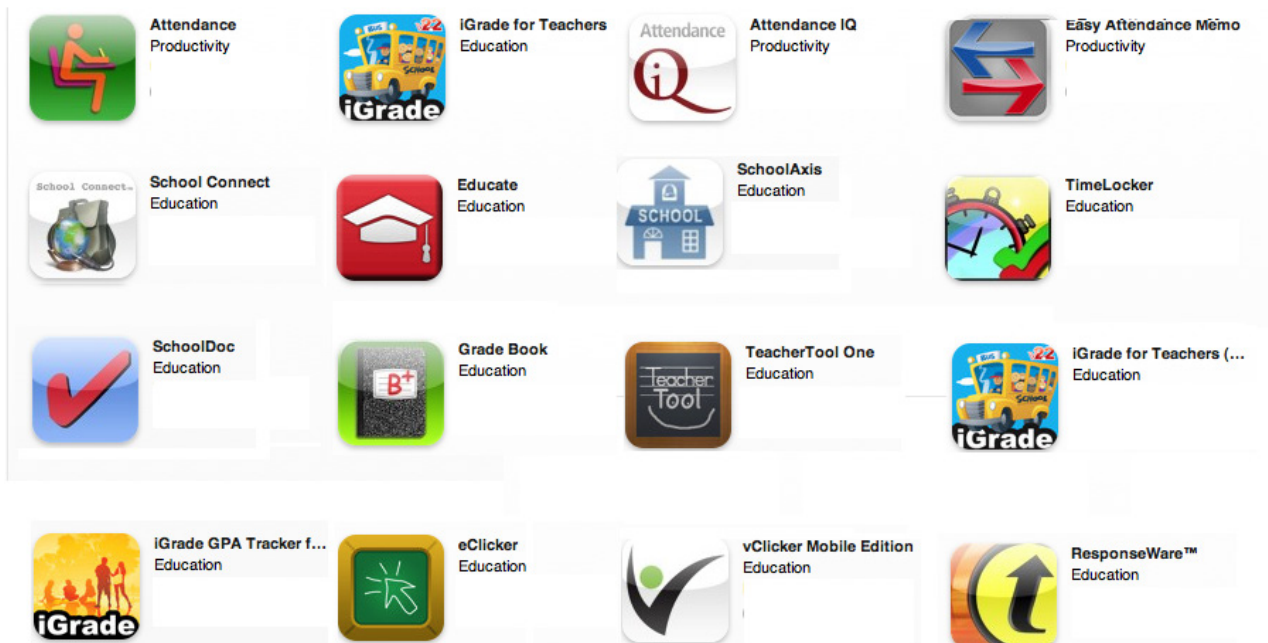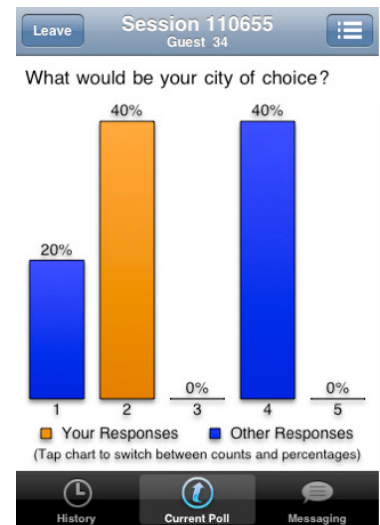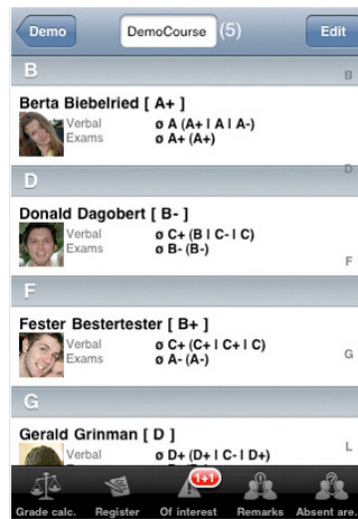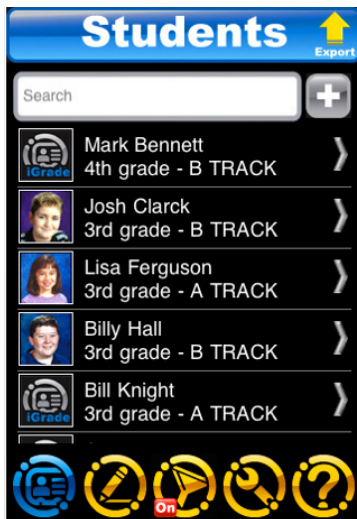
Special Needs Students

For several years, early-adopting schools have been using iPads to provide audio content to students; iPads have opened new possibilities. Teachers have long appreciated that listening to textbooks, stories or tests dramatically increases comprehension in aural learners. With the ability of controlled playback, meeting the individual needs of students is greatly increased. With the addition of video and now tactile control, the iPad is an excellent device to meet the needs of challenged students. There are several categories you may want to look at: visual (ASL and pictograms), aural (text to speech and speech to text), as well as administrative tools for special education teachers.

Your course website (on the downloadable Forms and Files) contains several files, located in the Special Needs folder of the Resources folder. These files are video presentations of a few of the many apps available specifically for, or adaptable to, special needs students. Also included are links to websites which specialize in special needs apps.

iOS comes with many features to make it easier for people with vision, hearing, learning, and mobility disabilities to get the most from their iOS devices. Guided Access helps students with disabilities such as autism remain on task and focused on content. It allows a parent, teacher, or administrator to limit an iOS device to one app by disabling the Home button, as well as restrict touch input on certain areas of the screen. VoiceOver, a screen reader for blind and low-vision users, is integrated with Maps, AssistiveTouch, and Zoom.
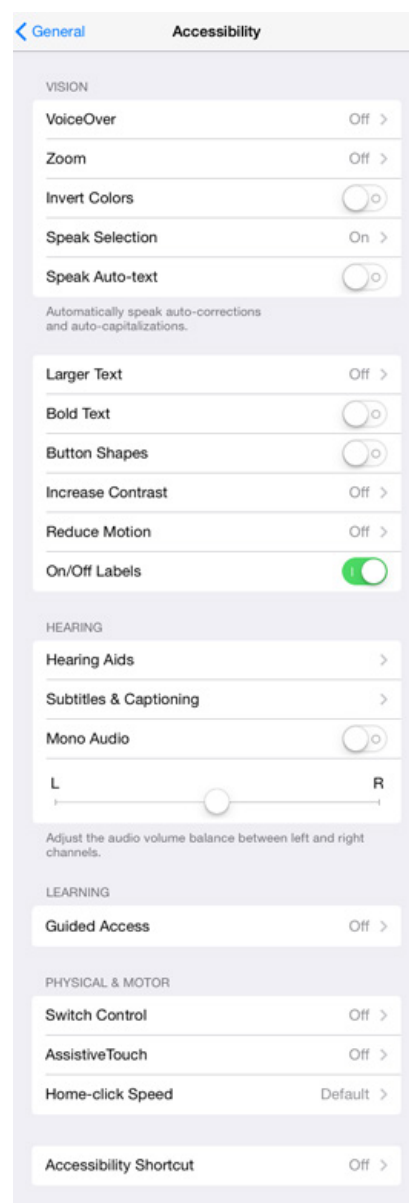
Assignment 7: Teacher Productivity / Special Needs Apps

In your web browser, revisit some of the sites you have explored and search for teacher productivity and / or special needs apps. Try searching for the names of the apps illustrated on the previous two pages. Use this form to record your findings for 3 of the apps you find particularly useful. Interactive PDFs of this form are located on the course website.

App #1

Name of App

Cost

Short Description

How would you use this app in your classroom?

App #2

Name of App

Cost

Short Description

How would you use this app in your classroom?

App #3

Name of App

Cost

Short Description

How would you use this app in your classroom?

Assignments 8, 9, 10: App Evaluations

In the previous assignments you jotted down brief notes on several apps you found at the iTunes store, websites, and other sources. In these next assignments, I'd like you to take a closer look at 3 apps of your choosing (from the iPad simulator, your Internet searches or even your own iPad / iPhone).

I find the best way to evaluate software is to use a rubric to guide your observations. On the following pages are 3 copies of an App Evaluation Form for use in scoring your 3 apps of choice.
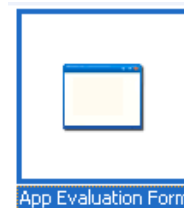
If you prefer, interactive versions are available on the course website. and downloadable resouce folder. You can fill the forms out on your computer and print them out.

You will record your findings by checking the appropriate boxes on the App Evaluation Forms. The score is a number based on the rubric, 20 being perfect. The score is a relative one - the main purpose of the exercise is to give thought to the comparable educational value of different apps.

Some of the categories are subjective (i.e. easy to navigate) and others more objective (i.e. has sound). If you are unable to ascertain certain aspects of an app by looking at the iPad simulator or other online resources (iTunes descriptions, publishers webpages, etc.) it is fine to venture an educated guess.

Again, the purpose of this assignment is to imagine how an app will fit into your teaching style and curriculum.

App Evaluation Form

App Evaluation Form	1	2	3	4	5
Does what it says it's going to do	Misses the mark completely. May freeze have typos, etc. Back to the drawing board	Minimal Value. Not complete. Doesn''t go far enough. Not intuitive to operate, (klunky)	Does what is says but no more. Little audio support Could use some tweaking to make it better	Does what it says and more. Support for more than 1 learning modalities (ex: auditory/visual learner) Ties directly to curriculum	Greatly exceeds expectations. Has value to students for age and subject. Either the perfect nugget for a single subject or has application across the curriculum or ages.
Use of Multimedia: audio visual text interactivity animation video	Makes use of text or pictures only	Brings in at least 2 media types	Has 2 media types with at least 1 of following: Limited Audio support Limited Interactivity	Has 2 media types with at least 1 of following: Significant Audio support Well placed Interactivity	Has a high level of most: Text, Visuals, Audio, Interactivity Great support for different learning modalities
Overall Educational Value:	Very little other than teaching ipod touch maneuvers. Too much like a game.	Still game-like but has some underlying benefit.	Sufficient educational value	Definite educational value	Definite Educational value
Options and Settings - adjustments can be made to suit student needs: volume, text size, language, level, tracking	No options, settings, help or support	Has 1 of the following: Options or settings Keeps track of user data Levels of difficulty Support (ie help if incorrect answer) Adjust levels if too many incorrect	Has 2 of the following: Options or settings Keeps track of user data Levels of difficulty Support (ie help if incorrect answer) Adjust levels if too many incorrect	Has 3 of the following: Options or settings Keeps track of user data Levels of difficulty Support (ie help if incorrect answer) Adjust levels if too many incorrect	Has 3-4 of the following: Options or settings Keeps track of user data Levels of difficulty Support (ie help if incorrect answer) Adjust levels if too many incorrect

Score Rubric   Each checkmark is worth a column point; 1 point for column 1, 2 points for column 2, etc. Scoring is relative between apps.   Notes

Name of App
Publisher
Cost

Print

Clear Form

App Evaluation Form 1

	1	2	3	4	5
Does what it says it's going to do.	☐ Misses the mark completely. May freeze. Has typos, etc.. Back to the drawing board!	☐ Minimal Value. Not complete. Doesn't go far enough. Not intuitive to operate, "klunky"	☐ Does what is says, but no more. Little audio support. Could use some tweaking to make it better.	☐ Does what it says, and more. Has support for more than 1 learning modality (ex: auditory/visual learner). Ties directly to curriculum. Easy to navigate, once you have been trained.	☐ Greatly exceeds expectations. Has value to students for age and subject. Either the perfect nugget for a single subject or has application across curriculum or ages. Easy to navigate.
Use of Multimedia: audio visual text interactivity animation video	☐ Makes use of text or picture only.	☐ Brings in at least 2 media types.	☐ Has 2 media types with at least 1 of following: Limited Audio support. Limited Interactivity.	☐ Has 2 media types with at least 1 of following: Significant Audio support. Well placed Interactivity.	☐ Has a high level of all the following: Text, Visuals, Audio, Interactivity Great support for different learning modalities.
Overall Educational Value	☐ Very little other than teaching ipod touch maneuvers. Too much like a game	☐ Still game-like but has some underlying benefit.	☐ Sufficient educational value.	☐ Definite educational value.	☐ Exceptional Educational value.
Options & Settings - Adjustments can be made to suit student : volume text size language difficulty level tracking	☐ No options, settings, help or support.	☐ Has 1 of the following: Options or settings. Keeps track of user data. Levels of difficulty. Support (ie help if incorrect answer). Adjust levels if too many incorrect.	☐ Has 2 of the following: Options or settings. Keeps track of user data. Levels of difficulty. Support (ie help if incorrect answer). Adjust levels if too many incorrect.	☐ Has 3 of the following: Options or settings. Keeps track of user data. Levels of difficulty. Support (ie help if incorrect answer). Adjust levels if too many incorrect.	☐ Has 3-4 of the following: Options or settings. Keeps track of user data. Levels of difficulty. Support (ie help if incorrect answer). Adjust levels if too many incorrect.

Name of App _____   Notes: _____

Publisher _____   _____

Approx.Cost _____   _____

Scoring: Multiply each check by the column heading (i.e. a check in column 1 is worth 1 point, a check in column 2 is worth 2 points, etc.) then add the results from all 4 areas to find the total. Scoring is a relative measure between apps.

Total Points _____

App Evaluation Form 2

	1	2	3	4	5
Does what it says it's going to do.	☐ Misses the mark completely. May freeze. Has typos, etc.. Back to the drawing board!	☐ Minimal Value. Not complete. Doesn't go far enough. Not intuitive to operate, "klunky"	☐ Does what is says, but no more. Little audio support. Could use some tweaking to make it better.	☐ Does what it says, and more. Has support for more than 1 learning modality (ex: auditory/visual learner). Ties directly to curriculum. Easy to navigate, once you have been trained.	☐ Greatly exceeds expectations. Has value to students for age and subject. Either the perfect nugget for a single subject or has application across curriculum or ages. Easy to navigate.
Use of Multimedia: audio visual text interactivity animation video	☐ Makes use of text or picture only.	☐ Brings in at least 2 media types.	☐ Has 2 media types with at least 1 of following: Limited Audio support. Limited Interactivity.	☐ Has 2 media types with at least 1 of following: Significant Audio support. Well placed Interactivity.	☐ Has a high level of all the following: Text, Visuals, Audio, Interactivity Great support for different learning modalities.
Overall Educational Value	☐ Very little other than teaching ipod touch maneuvers. Too much like a game	☐ Still game-like but has some underlying benefit.	☐ Sufficient educational value.	☐ Definite educational value.	☐ Exceptional Educational value.
Options & Settings - Adjustments can be made to suit student needs: volume text size language difficulty level tracking	☐ No options, settings, help or support.	☐ Has 1 of the following: Options or settings. Keeps track of user data. Levels of difficulty. Support (ie help if incorrect answer). Adjust levels if too many incorrect.	☐ Has 2 of the following: Options or settings. Keeps track of user data. Levels of difficulty. Support (ie help if incorrect answer). Adjust levels if too many incorrect.	☐ Has 3 of the following: Options or settings. Keeps track of user data. Levels of difficulty. Support (ie help if incorrect answer). Adjust levels if too many incorrect.	☐ Has 3-4 of the following: Options or settings. Keeps track of user data. Levels of difficulty. Support (ie help if incorrect answer). Adjust levels if too many incorrect.

Name of App _____   Notes: _____

Publisher _____   _____

Approx.Cost _____   _____

Scoring: Multiply each check by the column heading (i.e. a check in column 1 is worth 1 point, a check in column 2 is worth 2 points, etc.) then add the results from all 4 areas to find the total. Scoring is a relative measure between apps.

Total Points _____

App Evaluation Form 3

	1	2	3	4	5
Does what it says it's going to do.	☐ Misses the mark completely. May freeze. Has typos, etc.. Back to the drawing board!	☐ Minimal Value. Not complete. Doesn't go far enough. Not intuitive to operate, "klunky"	☐ Does what is says, but no more. Little audio support. Could use some tweaking to make it better.	☐ Does what it says, and more. Has support for more than 1 learning modality (ex: auditory/visual learner). Ties directly to curriculum. Easy to navigate, once you have been trained.	☐ Greatly exceeds expectations. Has value to students for age and subject. Either the perfect nugget for a single subject or has application across curriculum or ages. Easy to navigate.
Use of Multimedia: audio visual text interactivity animation video	☐ Makes use of text or picture only.	☐ Brings in at least 2 media types.	☐ Has 2 media types with at least 1 of following: Limited Audio support. Limited Interactivity.	☐ Has 2 media types with at least 1 of following: Significant Audio support. Well placed Interactivity.	☐ Has a high level of all the following: Text, Visuals, Audio, Interactivity Great support for different learning modalities.
Overall Educational Value	☐ Very little other than teaching ipod touch maneuvers. Too much like a game	☐ Still game-like but has some underlying benefit.	☐ Sufficient educational value.	☐ Definite educational value.	☐ Exceptional Educational value.
Options & Settings - **Adjustments can be made to suit student needs:** volume text size language difficulty level tracking	☐ No options, settings, help or support.	☐ Has 1 of the following: Options or settings. Keeps track of user data. Levels of difficulty. Support (ie help if incorrect answer). Adjust levels if too many incorrect.	☐ Has 2 of the following: Options or settings. Keeps track of user data. Levels of difficulty. Support (ie help if incorrect answer). Adjust levels if too many incorrect.	☐ Has 3 of the following: Options or settings. Keeps track of user data. Levels of difficulty. Support (ie help if incorrect answer). Adjust levels if too many incorrect.	☐ Has 3-4 of the following: Options or settings. Keeps track of user data. Levels of difficulty. Support (ie help if incorrect answer). Adjust levels if too many incorrect.

Name of App _____   Notes: _____

Publisher   _____   _____

Approx.Cost _____   _____

Scoring: Multiply each check by the column heading (i.e. a check in column 1 is worth 1 point, a check in column 2 is worth 2 points, etc.) then add the results from all 4 areas to find the total. Scoring is a relative measure between apps.

Total Points   _____

Assignments 11, 12, 13: Lesson Plans

In a perfect world ... I would visit your classroom, take a seat in the back, see you roll out your learning cart, hand each student an iPad, then watch the *magic* begin.

lesson plan form.pdf

I am confident what happened from there would be nothing short of amazing! Until that day comes, allowing me to evaluate your creative, thoughtful, engaging lesson plans will have to suffice.

constructivistlesson-form.pdf

On the following pages you will find a standard lesson plan form. Electronic versions are accessable via the course website.

If you prefer to use your own personalized or favorite lesson plan template, please feel free to do so; in fact, I encourage it.

Using apps from the iPad simulator or those that you have discovered online, for the next three assignments I ask that you develop three lesson plans for your classroom.

Be as creative as you wish ... the only limitations you place in completing these lesson plans are your own. I don't want you to fret over what I consider trivial details when developing your lesson plans. The focus is on content, intent, and benefit - to both you and your students.

I understand and appreciate that (at least for now!) most of you haven't access to a classroom set of iPads, so most all of you will not be able to present your lessons; **evaluation will not be possible**. If such is the case, leave the evaluation portion blank with the notation "unable to present" and an explanation.

Participants striving for an 'A' should demonstrate thoroughness and thoughtfulness in their lesson plans, providing as much detail as practical.

Feel free to hand write or word process your lesson plans - the choice is yours, but if your handwriting is as illegible as mine, you might wish to consider word processing.

Sample Lesson Plan

(From the *Apple Learning Interchange* website. A PDF version of this lesson and several others can be found on the course website).

Subject of Lesson: Health and Nutrition

Required App: MyPlate Calorie Tracker (free)

Lesson Objective: Awareness of the amount of calories consumed is an asset when trying to maintain your health. A healthy, active teenager needs 2000 - 2500 calories per day to maintain weight. If you consume more calories than you use your weight will go up. Helping students be aware of where calories are found and the number in each serving is a challenge.

Lesson Activities: Students can select a meal they would choose at their favorite restaurant. Students can then determine the total calories they consume in their meal, using the Restaurant Nutrition app. Students will find total fat grams, total grams of carbohydrate and grams of protein, sodium and sugars for their meal.

Students can then use the app's search tool to find better choices.

Teaching Strategy: Introduce unit with statistics on adolescent obesity and health concerns. Take a straw poll on how often students eat fast food, and where. Review concepts of calories and weight gain. Hand out iPod Touches with Restaurant Nutrition already installed. Students will have thirty minutes to research and journal their findings. Using the projector and a spreadsheet, students will graph their findings.

Evaluation:

Was the lesson objective met?

Did all students participate and complete the project?

How was achievement measured?

How would you modify the lesson in future presentations?

Lesson Plan Template 1   *Interactive PDFs of this form are located on the course website.*

Subject of Lesson:

Required App:

Lesson Objective:

Lesson Activities:

Teaching Strategy:

Evaluation:

Was the lesson objective met?

Did all students participate and complete the project?

How was achievement measured?

How would you modify the lesson in future presentations?

Lesson Plan Template 2

Subject of Lesson:

Required App:

Lesson Objective:

Lesson Activities:

Teaching Strategy:

Evaluation:

Was the lesson objective met?

Did all students participate and complete the project?

How was achievement measured?

How would you modify the lesson in future presentations?

Lesson Plan Template 3

Subject of Lesson:

Required App:

Lesson Objective:

Lesson Activities:

Teaching Strategy:

Evaluation:

Was the lesson objective met?

Did all students participate and complete the project?

How was achievement measured?

How would you modify the lesson in future presentations?

Standards Correlation

By designing and presenting lessons to your students using the understanding and experience you have gained from this course, you will fullfil several of ISTE's Technology Standards for Teachers. These have been defined as necessary tools for today's teaching professional. This course does not address any specific states' technology standards. It does, though, reinforce the ISTE educator standards.

It is important you understand these standards and their performance indicators, and can effectively apply them for practical use. For the purpose of this next assignment you will be asked to select any 5 projects presented in this course, then align them to the **ISTE Educator Standards**. You can find the standards detailed further at: ***www.iste.org/standards***

Once the web page is loaded, scroll down a bit and click on the 'Learn More' link under the center 'Educators' column.

You can also see the standards on the 'Resources' page of my website, ***www.steveyoungfpu.net***

You will be asked to record your findings on the following page for three (3) assignments. To assist you in completing this project, please refer to the sample below.

Example:

To correlate Assignment #7, "Special Needs Apps," to the ISTE educator standard, the digit '2' indicates that the project meets standard 2. - "Leader."

Next, the letter 'b' is the relevant Performance Indicator for Standard 1: "Advocate for equitable access to educational technology. . ."

In explanation of the rationale underlying the selections, when you research special needs apps, you have certainly met the goal of this standard and performance indicator! Congratulations! So, in putting it all together, this is how the completed Standards Correlation Chart would appear had you chosen Assignment #7 - "Special Needs"

NOTE: You do not need to explain the rationale behind your selections; I did so only to illustrate the concept.

Project   #7   Standard Number: 2.

Name of Project: Special Needs   Performance Indicator: b.

Assignment 14: Standards Correlation Chart

Interactive PDFs of this form are located on the course website.

Assignment # __   Standard   _____

Name of Assignment: _____   Performance Indicator   _____

Assignment # __   Standard   _____

Name of Assignment: _____   Performance Indicator   _____

Assignment # __   Standard   _____

Name of Assignment: _____   Performance Indicator   _____

Closing Thoughts . . .

The past couple of years have been a very exciting time for the use of technology in education! I remember the introduction of desktop computers, laser disks and video projectors. None of these technologies, at least at first, felt 'ready for prime time'. Early adopters were the more experimental, tech-savvy teachers who did not mind failing now and again.

iPads feel different. They arrived on the scene with a large, useable base of educational apps, ready to go. The user-experience is simple and straight-forward; I have handed my iPad to my 3 year old grandson and my 85 year old mother-in-law and they both were using it (and having fun at the same time!) in less than a minute. Educators who have used iPads in the classroom find them a valuable and engaging asset to their teaching arsenal.

The intent of this course was to expose you to the possibilities and capabilities of the iPad. Hopefully you have picked up a few pointers and have imagined a future where your students, under you guidance, can explore, question and discover more than what was possible only yesterday.

Assignment 15: Post-Course Survey

As with all written assignments in this course, you may either word process and print out your responses then submit a copy, or write directly in the workbook and return a copy with your completed coursework. Please, do not return the entire workbook. Interactive PDFs of this form are located on the course website.

About how many hours did you spend completing the assignments?

Having used the major elements of an iPad, which aspect (portability, cost, software, etc.) do you find most beneficial and/or productive, and why?

Do you plan on teaching your students how to use some aspect(s) of the iPad and its apps? If so, how? If not, why not?

OPTIONAL (*just for fun!*): In their course evaluation, a former TEC 964 student suggested an extra credit assignment that I thought was a great idea, so here it is. As I have told you a bit about myself at the end of this workbook, it would be nice to know a bit more about you as well! So, if you'd like, please list 5 iPad apps that best describe YOU!

Course Evaluation

As with all written assignments in this course, you may either word process and print out your responses then submit a copy, or write directly in the workbook and return a copy with your completed coursework. Please, do not return the entire workbook.

Did this course meet your expectations? Please briefly explain.

How do you feel about the structure of the course? Was it organized in an orderly way, making it easy to follow? How would you improve the structure?

Have you any comments to offer about the assignments? Any suggestions for additional assignments?

How did the workload of this course compare to that of other courses with equivalent units?

How did you hear about the course?

Did your materials arrive in a timely fashion and in good condition?

Would you recommend this course to others?

About Your Instructor ...

I was born in 1953 at the Presidio in San Francisco, California. The second child of Maj. John and Bette Jane Young, I was enthusiastically welcomed by my only sibling - a brother, six years my senior. After my dad retired from the Army he still had a touch of the wanderlust so we spent the next few years exploring Wyoming and Colorado. In 1963 we settled in Durango where my brother and I spent our days climbing trees, skipping stones across the Animas River, and exploring the La Plata mountains, which were our backyard.

Using a Steadicam during the filming of a commercial for a regional TV station in the days before gray hair!

In the late 1960s my parents moved back to the Bay area of California where I finished high school then went off to college, enrolling at California State University in Fresno. I majored in Mass Communications - a combination of English, Theater Arts and the technical aspects of radio, television and film production. I had those typical, youthful aspirations of becoming a 'rich and famous' script writer and filmmaker. Upon graduation I partnered with a local film production company and spent the next several years writing, producing and filming documentaries and television commercials.

My beautiful bride Becky, on our wedding day! After all these years she's still the love of my life (and the world's greatest cook!).

A combination of the reality of parenthood and a souring economy in the early '80's guided my decision to return to school to obtain my teaching credential. The birth of my daughter in 1983 cemented my decision to opt for the stability of teaching over the uncertain world of the arts. I began as a classroom teacher at the same time computers were first being introduced to the public, in general, and schools. I have always had an affinity for machines and gadgets so I soon transitioned from 'traditional' teaching to working with technology in education; the best decision ever!

Taking a break at my desk at Madera Unified, while administering an early (circa 1990) school-wide network.

Scuba diving (a passion of mine) with my daughter off the coast of Maui, in the beautiful state of Hawai'i.

Within a year I was the Technology Teacher/Coordinator for a small high school; teaching programming in a lab and setting up local area networks. As technology evolved and became more affordable, the District purchased classroom computers and I, seeing the need, began writing record-keeping and database programs for teachers.

Fishing the Animas River in Durango, CO, where my brother and I used to roam. Pretty nice catch! We only keep what we eat, and this one was delicious!

By the early '90's I was assisting with technology District-wide and speaking at regional and state conferences. It was at this time I began teaching summer and weekend seminars at Fresno Pacific University (then Fresno Pacific College) on integrating technology in to the classroom. Through membership in CTAP (California Technology Assistance Project) I also provided professional development, planning, and implementation assistance to help schools utilize technology to support teaching and learning.

In San Francisco receiving California's prestigious Golden Bell Award for an exemplary program in technology, with Madera Unified school board trustees.

Visiting the St. Louis Arch with my wife - a day trip from Indianapolis after our annual trip to the Indy 500.

I recently retired after more than 30 years of service to Madera Unified School District. With my 'extra' time, I will be developing new courses for Fresno Pacific. My wife, Becky, and I enjoy interacting with teachers from all over the country - we recently began traveling across the US on Amtrak and have already logged over 10π,000 miles riding the rails, making whistle stops at many of your hometowns!
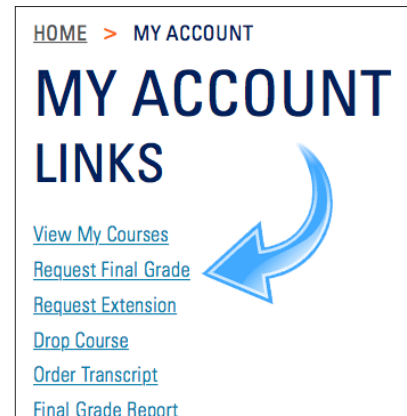

Me with Becky's family, including her three children and all eight (so far!) of our grandkids, at Becky's parents' 60th wedding anniversary celebration.

DIRECTIONS FOR SUBMITTING A REQUEST FOR ONLINE GRADING

FPU requires I submit your grade online. For me to do that you must request online grading via your FPU account. When you've submitted your completed coursework (no sooner):

- Login to your account on the CPD website at ***https://ce.fresno.edu/my-account***

- Click on 'Request Final Grade'

- Select this course from the list of ungraded courses in which you are currently enrolled

- Click the box confirming accuracy of the information

- Click Submit

- FPU will email me that you have completed the course and are ready to be graded

SIGN IN

HOME > MY ACCOUNT

MY ACCOUNT LINKS

View My Courses
Request Final Grade
Request Extension
Drop Course
Order Transcript
Final Grade Report

Please submit your request for online grading the same day you submit your completed coursework (no sooner). I cannot submit your grade until online grading has been requested.

If I receive your final coursework but you've yet to request online grading, expect a delay while I attempt to contact you in reminder. If you encounter technical difficulties with the on-line grading system please contact FPU directly; I am unable to troubleshoot their system.

Once I have submitted your grade to FPU I will notify you via email that this has been accomplished. Processing grades submitted electronically is not automatic; FPU strives to post grades the same day, but it may take up to 2 business days to certify and post your grade (FPU will email you once your grade has been posted).

Prior to ordering a transcript, particularly a '*RUSH*' transcript, verify your grade has *officially* been posted. Login to your FPU account and click Final Grade Report. If your grade in this course appears, print off your Final Grade Report (FPU no longer mails Grade Reports - you must print them out yourself) and proceed with ordering transcripts.

If this course does not appear, although I notified you I submitted your grade, please contact FPU (1-800-372-5505) directly with your inquiry. It may be they are 'holding' your grade for whatever reason, typically if you are overenrolled.

I hope you found the course beneficial. I'll keep an eye out for your packet, and look forward to reviewing your work! Again and as always, thanks!