Learning with iPad
Reaching All Learners

One in seven students worldwide has a disability that can impact their learning. Educators find iPad ideal for meeting diverse learning needs because it gives all students access to create, communicate, personalize, and explore in new and powerful ways.
How iPad can help

At Apple, we believe that technology should be accessible to everyone. So we don’t design products for some people or even most people. We design them for every single person. And that’s why iPad has powerful assistive features built right in to complement each learner’s vision, hearing, motor skills, and learning needs.

iPad can transform into almost any tool students need—a communication device, a daily planner, a switch, a reader—and so much more. Students are able to collaborate, create, and engage in a modern world as iPad becomes a powerful and affordable assistive technology.

Educators are finding profound new opportunities to personalize learning using iPad. And iPad also helps prepare students to lead independent lives as they track their days using Calendar, Reminders, and a wide variety of communication apps.

With iPad, students can learn in ways that meet their own specific needs. Speak Screen reads aloud to them. VoiceOver walks them through actions like opening a document or selecting a menu item. Dictation converts spoken words to text. And Siri helps students manage everyday tasks, like setting a reminder for a test.

This booklet provides a quick look at the built-in features on iPad that you can use to support all your students. You’ll also find examples of outstanding apps and books, as well as activity ideas and stories from schools that are having great success using iPad to help reach all learners.
Built-in features for reaching all learners

iPad includes built-in apps and accessibility features that support all learners. Here are some examples.

**Type to Siri.** You can set Siri to allow typing instead of voice. Using the onscreen keyboard, students can get answers to questions, type a text, open apps, and get reminders of upcoming activities.

**Dictation.** Thanks to the built-in microphone and Dictation, learners are no longer limited by having to write or type their thoughts.

**Speak Screen and Speak Selection.** Students can have all the content on iPad read back to them or highlight a specific range of text they want to hear. They can follow along as highlighted words, sentences, or words within each sentence are read aloud.

**Typing feedback and predictive text.** Students can have a word spoken back to them once they’ve typed it, which confirms they’ve correctly spelled and written the word. Predictive text helps with spelling by suggesting a list of words they can hear, then choose from.

**VoiceOver.** VoiceOver is a revolutionary built-in screen reader that’s more than a text-to-speech tool. It allows students to interact with objects onscreen, intuitively gauging their location and context through auditory clues. They can also quickly navigate between apps.

**Clock, Calendar, and Reminders.** These apps help students adopt organization strategies to improve executive function skills. Stopwatch and timer features of the Clock app help students stay focused on a task and transition between activities. With Calendar and Reminders, they can color-code events to manage their schedules, enhance text with symbolic emojis, and track essential tasks through visual and audio notifications.

**FaceTime, Camera, and Photos.** FaceTime allows students to communicate visually through sign language, gestures, and facial expressions. Using Camera, they can capture images and movies, then save them to Photos to use in their projects.

**AssistiveTouch and Switch Control.** AssistiveTouch makes the Multi-Touch screen more accessible to those with physical or motor challenges. Built directly into iOS, Switch Control allows students to navigate through onscreen items and perform certain actions using Bluetooth-enabled switch hardware.

**Guided Access.** Parents, teachers, or therapists can have students focus on one app at a time and limit the amount of time spent in an app using Guided Access. So iPad can be a powerful tool for autistic students or those with attention and sensory challenges.
Students often demonstrate their thinking and understanding of content in ways that don’t rely solely on written text. The built-in content creation apps on iPad help them scaffold through visuals, text, and other media. Here are a few ideas for using Apple creation apps with diverse learners:

**Pages.** Teachers and students can create accessible content to share their ideas with the rest of the world. Students with handwriting and/or written expression difficulties can use Pages to improve their vocabulary and word-building skills as they create media-rich documents, social stories, reports, and more.

**Numbers.** Create multisensory spreadsheets to help students curate different types of content to produce charts, document processes, analyze data, or create infographics to help tell their stories their way.

**Keynote.** Present ideas and messages through visuals like shapes, pictures, diagrams, video, charts, and sound and voice recordings.

**iMovie.** Build video versions of picture books using titles, images, voiceovers, and sound effects, and allow students to share their learning outcomes in engaging and creative ways.

**GarageBand.** Capture narrative explanations in the form of podcasts, record a book discussion, use sound to learn inflection and how to differentiate one voice from another, and express ideas through musical creations. GarageBand is great for speech therapy or helping deaf students see an audio wave file to understand how loud things sound.

**Clips.** Create videos that capture learning quickly and easily for assessments, how-tos, and more. And using Live Titles, students can add animated captions and titles—just by talking—that sync perfectly with their voice.
A wide variety of learning materials are available for iPad that offer students new and exciting ways to learn. And many of these outstanding resources are ideal for teachers as well.

**App Store.** A vast collection of engaging apps on the App Store can turn iPad into just about any tool or resource a student needs. These apps help students communicate, stay organized, create, and learn in their own way.

**iBooks Store.** From Multi-Touch books made for daily student use to books created for teachers with ideas for supporting their students, thousands of engaging books are available on the iBooks Store. Many of these Multi-Touch books have built-in reading tools, such as spoken text, instant access to dictionary definitions, and study cards that help with comprehension.

**iBooks Author.** All Multi-Touch books on the iBooks Store were created with iBooks Author. With iBooks Author on a Mac, educators and students can create their own interactive books for viewing on iPad. Teachers can develop personalized learning materials, and students can document what they've learned. An outstanding example is *Reach for the Stars*, which includes materials that students can touch, hear, read, and see.

**iTunes U.** This online catalog includes free education courses from top schools and prominent institutions worldwide, many of which are ideal for teachers. For example, the course *nABLEing All Learners with iOS Devices* by Luis Perez focuses on creating inclusive learning environments that allow all learners to access the curriculum and express their creativity through the accessibility and universal design features of iOS devices and apps.
Here are a few examples of how the iBooks app, the iBooks Store, and iBooks Author can support learning and teaching for students with varying needs.

Jenny Grabiec believes that all students who need assistive technology tools should have full and complete access to them when needed. In her interactive book, *iCan with iOS: Apps, Tools & Strategies for Students with Learning and Attention Issues*, she discusses how technology can play a powerful role in the classroom.

In *Inclusive Design for iBooks Author*, Greg Alchin distills research-based universal design principles and learning design strategies into clear and easy techniques. By designing your iBooks Author project for inclusion, you can make it more usable to a wider audience.

**Collections.** Our editors have created these collections to help educators find great resources on iTunes and in the iBooks Store.

- Special Education
- Accessibility
- Autism acceptance
- Popular apps using VoiceOver
- Student-Authored Books
- Free Books by Educators
Apps for students with varying needs

Here are just a few examples of how engaging apps can support all learners.

Vision

**Seeing AI: Talking Camera for the Blind.** This app opens the world to the blind and low-vision community through an audio experience that uses descriptions of nearby people, text, and objects.

**KNFB Reader.** Take a picture of a book page and have the text spoken out loud or read in braille to low-vision students.

Language and learning development

**Voice Dream Reader.** Read articles, documents, and books out loud with advanced text to speech and a configurable visual layout tailored to suit every reading style and level.

**Newsela.** Support learners with news articles at five reading levels. As students read and take quizzes, the app adjusts the reading level to keep articles challenging and engaging.

**Social Stories Creator for Educators.** Easily create, share, and print social stories and visual schedules from scratch or using included templates that cover a variety of social and behavioral skills.

**eSpark.** Create a personalized blended learning solution for every student using individual student data, a variety of educator-curated apps, and students’ unique learning needs.

Speech

**News-2-You.** This weekly newspaper for beginning readers helps students connect with the world through symbol-supported news articles, puzzles, games, and recipes.

**Proloquo2Go.** Designed to promote language development and grow communication skills, this symbol-supported app gives a voice to students who can't speak.

Motor and physical

**Draw and Tell HD.** Students of all ages draw, color, decorate with stickers, create animations, and record stories to encourage imagination, storytelling, and open-ended play.

**Dexteria Jr. Fine Motor Skill Development.** Designed for students age 2 to 6, this app provides hand and finger exercises to develop fine motor skills and handwriting readiness in a fun and engaging way.

Social emotional

**The Social Express II.** This engaging, educational curriculum for students with social learning challenges teaches them how to think about and manage social situations.

**Breathe, Think, Do with Sesame.** Students can work on problem-solving, self-control, planning, and task persistence using this bilingual (English and Spanish) research-based app.

Classroom management and executive functioning

**ClassDojo.** Build a positive classroom culture by encouraging students to work hard and be team players. Safely and instantly message parents with updates that include photos and videos.

**Workflow.** Students use this personal automation tool to create powerful workflows by dragging combinations of actions in Calendar, Maps, Music, Photos, and more.
An incredible range of third-party hardware products extend and connect with innovative apps to support students with a variety of needs.

**Physical and motor skills**

**Skoog.** One of the greatest barriers to making music for students with disabilities is the dexterity required to play a traditional musical instrument. Skoog is a truly inclusive instrument that removes that barrier.

**The AbleNet Blue2.** Provides single or dual switch access via Bluetooth connection to iPad.

**Hearing and visual**

**Nucleus 7 Sound Processor.** This device allows students who have the Cochlear Nucleus Implant to stream sound from iPad directly to the sound processor in the implant.

**Humanware Brailliant BI 32 Braille Display.** Designed ergonomically for extensive reading with the full comfort and intuitive navigation of HumanWare’s signature thumb keys.

**Literacy and learning**

**Tiggly Learner Kit for iPad.** Designed on principles of play and learning research, Tiggly toys bring physical and digital learning together. A recent study by PlayCollective, an independent research firm specializing in early childhood development, showed increases in early number skills of up to 71 percent for students who played with Tiggly Math for only two weeks.

**Tangible Play—Osmo.** Merges the power of physical play with the digital advantages of real-time feedback on iPad. Playing beyond the screen invites students to collaborate on tables or floors while manipulating tangible game pieces such as number and letter tiles.
Student learning activities

Practice and track reading fluency

**Objective:** Students read text orally at an appropriate rate with accuracy and expression.

**Overview:** Using the Clips app with Live Titles, students record themselves reading a passage aloud. Clips is an engaging way for struggling or disengaged readers to see and hear improvements in their pronunciation, speed, and accuracy. Students can use Live Titles to easily create animated captions and titles that are perfectly synced with their voice. And they can collect their fluency Clips over time and use Book Creator to create a progress portfolio.

Research and productivity

**Objective:** Students conduct research and create multisensory notes.

**Overview:** Students begin online research with Safari and the built-in Reader feature to view web pages without ads or other visual distractions. They use Alex, Apple’s proprietary text-to-speech voice, to highlight text and have it read aloud. Students then open Notes using Slide Over—without closing Safari—and paste important text or images they gathered during their research. They record observations and create quick sketches to help visualize what they learned. The built-in microphone and Dictation on iPad mean learners aren’t limited to only write or type research notes.
Teacher activities

Documenting learning and collecting data

Objective: Teachers assess students using screen casting on iPad to provide a multisensory approach for capturing student understanding and making their thinking visible.

Overview: Teachers use Explain Everything to provide students with a visual math prompt, complete with an audio and text description. Students plan out their responses with a script and example drawings in Notes. They then capture their metacognition by pressing record and explaining their thinking verbally while using the interactive whiteboard to add words, numbers, illustrations, and more. Teachers can use the recording to document growth for measurable goals, help inform future instruction, and communicate progress with families and other service providers.

Procedures and task analysis

Objective: Teachers produce step-by-step videos to break down a process or document a procedure for students who have difficulty organizing and processing information.

Overview: Starting with traditional Post-it Notes, teachers brainstorm the steps needed to accomplish a particular student task. They then capture the steps using the Post-it Plus app and put them into a sequence that can be exported to a Numbers spreadsheet. This allows teachers to modify the instructions or add images and text to provide visual and verbal cues. Finally, teachers use Clips to create a video that combines Live Text, visual prompts, video, and audio to provide clear step-by-step directions.
Impact on learning

Schools are seeing great results by providing students with access to iPad and personalized learning content. Here are just a few examples.

**Elizabeth Forward School District.** With the launch of their one-to-one iPad implementation in 2013, this district has seen remarkable improvement in student engagement and academic achievement using eSpark. Before eSpark, primary special education students began the school year significantly behind their peers, averaging in the 48th percentile nationally. That same group grew 25 percentile points in math and English language arts after using the eSpark app and iPad, closing the achievement gap.

“**This is a platform that most of our students are familiar with, and they are more receptive to using it in their day-to-day lives. It helps them become more independent—and it hooks them to be more engaged in their education.**”

Shaun Exsteen, Executive Director, Institute for Achievement & Learning, Lynn University

**The Fletcher School.** Students at this North Carolina school rely heavily on the built-in accessibility features of Apple technology to meet their individual needs and to author and publish authentic content using iBooks Author and iTunes U. They use Siri for dictation and independence, and text to speech in Multi-Touch books gives students with dyslexia the opportunity to read a novel at their grade level. Using these built-in accessibility features means that students with a disability in written expression can become published authors. And for students with expressive language disorders, iMovie offers a novel way to help them paint a picture in their minds before the actual writing begins.

**California State University, Northridge.** In 2013, this university launched the myCSUNtablet initiative, a one-to-one iPad deployment with a goal of increasing student engagement, improving the quality of teaching materials, and reducing cost. In conjunction with CSUN’s Universal Design Center and Disability Resources Educational Services, they developed a simple six-step process for making apps easy for faculty to test. Biology classrooms that used iPad realized a 20 percent increase in assessment scores as compared with those not using iPad.

“**iPad is indeed a powerful tool for learning that has wide-ranging impacts on teaching and learning, including changes in pedagogical practices, improved learning outcomes, and engagement for students.**”

Colin Schot, Principal, Sunshine Special Developmental School

**Victoria Department of Education.** In 2012, the government in Victoria, Australia, completed a trial of 700 iPad devices in primary and secondary schools to test whether education outcomes improved. The results were positive, with 83 percent of primary teachers and 67 percent of special education teachers observing improvement in literacy outcomes. In addition, they reported 85 percent of primary teachers and 90 percent of special education teachers thought that students were more motivated and engaged in learning.

“**We need to provide multiple means of learning in our classrooms. Multiple ways to learn new concepts and make connections. Opportunities to touch, move, see, and hear should be abundant.**”

Jenny Grabiec, Apple Distinguished Educator, The Fletcher School
Managing learning in your classroom

These solutions are great for sharing, storing, and managing iPad devices or allowing students to share their work with the teacher or the whole class.

The Classroom App
Classroom turns iPad into a powerful teaching assistant, helping a teacher guide students through a lesson, see their progress, and keep them on track. With the Classroom app, teachers can easily launch the same app on every student device at the same time or launch a different app for each group of students. Classroom helps teachers focus on teaching so students can focus on learning.

Shared iPad
Shared iPad is a feature for schools that share devices, but still want to provide personalized experiences. Before class begins, teachers can assign any student any shared iPad. Students know which devices to use because their pictures are on the Lock screens. Students can access their personal content using a password or an easy-to-remember four-digit PIN. And because data is locally stored on the devices, after student log in, their homework, apps, and assignments are exactly as they left them.

Storing and charging solutions
A mobile cart or charging station makes it easy to store, secure, and charge your devices. And they’re ideal for sharing iPad devices between classrooms.

Apple TV
In a classroom with Apple TV, a teacher can share student work on the big screen, mirroring any student’s iPad screen to a TV monitor or projector. It’s a great way to highlight work, encourage collaboration, and keep everyone involved. You can also customize Apple TV specifically for vision needs by choosing from a range of color filters, hearing audio descriptions of movies and TV shows, or using Zoom to magnify menus and keyboards. Great content like the following is available on Apple TV:

My Reasons TV. This app extends the My Reasons app for iOS that helps educators and students build better habits. Students stay motivated by focusing on their reasons for wanting to build better habits while keeping track of their progress.

MyTalk Tools. For students with communication challenges, this app allows users to display and use boards from the MyTalk Tools iOS app. MyTalk Tools helps students with communication difficulties say what they want with sequences of words, sounds, and images.

White Noise. Learners can focus and stay on task soothed by sounds that include ocean waves, forest sounds, raindrops, and more. The app plays in the background and can be combined with the multiple screen-saver options to add a comforting mood to any classroom.

“Shared iPad will allow our district to transform a cart of shared devices into a personalized learning experience for each student.”

Eric Culpepper, technology support specialist, Goose Creek Consolidated Independent School District
Resources

Many resources are available that can help teachers learn how to use our products and integrate them into classroom learning. Here are some to get started.

Accessibility support
Learn more about Apple and accessibility and view videos of how people with diverse needs use Apple products. If you'd like help with accessibility features, visit the Apple Accessibility Support web page. You can also send an email to our accessibility team at accessibility@apple.com or call 1-877-204-3930.

Apple Teacher
Apple Teacher is a free professional learning program open to all educators. It's designed to support and celebrate educators using Apple products for teaching and learning. Whether you're new to Apple products or have been using them for years, whether you have a single device or one for every student, you can build skills on iPad and Mac that directly apply to activities with your students, earn recognition for the new things you learn, and be rewarded for the great work you do every day. Learn more >

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