

Learning with iPad

# Preparing students for careers



Mobile technology is changing the way we learn and work. It's driving transformation in businesses of all sizes and across all industries. This digital transformation is redefining what career readiness means and driving a shift in the skills students need to be successful. Learning with iPad prepares them for a world that's increasingly mobile, global, and connected.



# Get students career ready with iPad

We live in an age of unprecedented information, access, and connection. Technology has changed the way we communicate, engage, and live. Companies are leveraging technology to create new models for how they work, and they're defining new jobs that didn't exist 10 years ago. Employers are finding that soft skills like problem-solving, creativity, collaboration, communication, and adapting to change are more important than ever.

iPad can help engage students as they build these skills and prepare for high-demand careers and industries. With its built-in features, access to a breadth of resources, and free Apple-designed learning resources, iPad can help students collaborate, brainstorm, and use design thinking to create solutions to real-world problems. And with advanced technologies designed to make augmented reality experiences more powerful and engaging, iPad creates an experience that's simply not possible on other platforms.

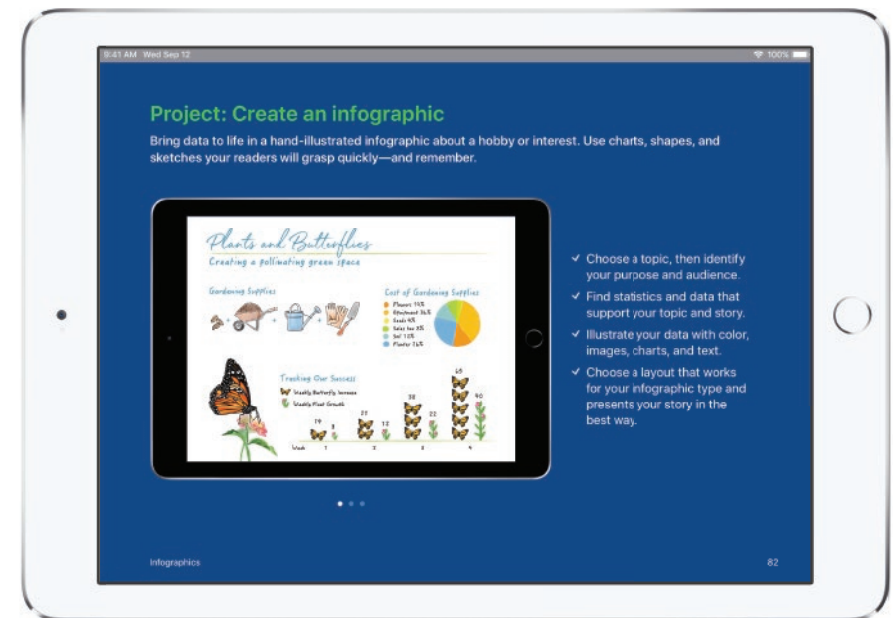
This guide can show you how iPad helps empower students to become better communicators, skilled collaborators, and creative problem solvers—all essential skills for success in the workplace.

# Ignite creativity in every student

According to World Economic Forum, creativity will be one of the most important and in-demand skills for employees by 2020.\* To thrive in today's world and to shape tomorrow's, students need to tap into their creative potential and learn to communicate in new and innovative ways. We designed Everyone Can Create to help ignite creativity and give students the skills to communicate through drawing, photography, music, and video on iPad.



Everyone Can Create includes a versatile collection of free project guides designed by educators, artists, musicians, and photographers to help bring creativity to learning in meaningful ways. Available on Apple Books, each guide provides a range of activities to help students learn vocabulary and techniques in a specific medium through fun projects. Learn more about [Everyone Can Create >](#)



*Everyone Can Create: Drawing* includes projects such as this one, which helps students build skills to tell a visual data story. Students learn how to design a layout to convey information, organize data to tell a story, and create visuals to simplify and represent data.

\*World Economic Forum, "The Future of Jobs: Employment, Skills and Workforce Strategy for the Fourth Industrial Revolution," January 2016. [www3.weforum.org/docs/WEF\\_Future\\_of\\_Jobs.pdf](http://www3.weforum.org/docs/WEF_Future_of_Jobs.pdf).



# Teach the language of innovation

Code is all around us—from the social apps that keep us in contact to the systems that make a car run. And coding is throughout every industry, not just high tech. Whether a student wants to be an artist, an engineer, a mechanic, or a chef, there's little doubt that software will play an even bigger role in the student's life than it does today. In a world powered by code, understanding key software concepts has become a new literacy. And when you teach coding, you also teach skills like critical thinking and problem-solving.

To help educators prepare students for this future driven by code, we developed the comprehensive Everyone Can Code curriculum with lessons on iPad and Mac, teacher guides, and apps to make it easy to teach coding in the classroom.



Students can even experience how code works in the physical world by using iPad to control robots and drones.

For first-time coders, there's Swift Playgrounds. This free app lets students control characters with real code and learn key programming concepts by solving puzzles. The Swift Playgrounds app takes full advantage of all the Multi-Touch features of iPad, so students can drag code around with their fingers and watch the effects immediately unfold.



Swift Playgrounds makes coding as fun as playing a game.

When students are ready to create an app, they can move on to developing in Xcode on Mac. We created lessons to equip students with the same tools, techniques, and concepts professionals use. The App Development with Swift curriculum gives high school and college students the critical skills they need to qualify for high-demand and high-skill jobs. Learn more about [Everyone Can Code >](#)

# Explore new possibilities with augmented reality

Firsthand experience is one of the most powerful ways to learn. And with augmented reality (AR), students can experience just about anything they can imagine. They can break down the complicated mechanics of a car engine before touching a wrench, or analyze the most minute bones of the human body without making a single incision. The possibilities for engaging learners are endless.

AR is also incredibly useful for solving everyday problems. Students can measure real-world objects or navigate complicated spaces without ever looking at a map. With AR, they can discover new ways to accomplish things they know how to do today—and do new things they could never have imagined.



Included in iOS 12 for iPhone and iPad, Measure uses the camera and AR to measure the length or area of objects, including ones that are out of reach. Students can use Measure to quickly gauge the size of objects in the real world and explore their environments in a new way.

iPad is built for movement, making AR experiences easy and natural. It's packed with advanced technologies like accelerometers, motion sensors, powerful cameras, and an operating system that was created with AR specifically in mind. The beautiful Retina display and thin and light design make iPad a perfect device for experiencing AR. All together, iPad creates an integrated augmented reality experience that's simply not possible on other platforms. Explore [lesson ideas](#) that can help you bring augmented reality to your classroom.



Insight Heart lets students explore human anatomy in 3D to develop a deeper understanding of hidden layers and body systems. They can examine a realistic model of the human heart from all angles and view a simulation of blood flow through all four chambers of the heart.

# Collaborate, solve problems, and be more productive

iPad comes with free, powerful apps that allow students to collaborate with a team, solve problems creatively, and be more productive. To take learning further, over 1.3 million iPad apps available on the App Store can transform the way students work, create, collaborate, and demonstrate their understanding no matter what career pathway they're pursuing.



**Apple Pencil support.** Students need to capture their ideas with notes and sketches, and Apple Pencil support on iPad is the perfect way to do it. Students can jot down notes and sketch ideas and observations on iPad as naturally as they do on paper.



**Pages.** From project plans to lab reports, Pages helps students enhance their writing with photos, movies, audio recordings, and drawings. They can also use the book templates to create interactive portfolios of their work that include image galleries, videos, drawings, shapes, and more.



**Keynote.** Keynote makes it easy for students to create professional-looking presentations complete with drawings, animations, charts, audio recordings, and more.



**Numbers.** Students can organize and visualize data in a Numbers spreadsheet using any of the built-in templates for quick formatting. They can apply mathematical formulas to make sense of the data, analyze it using graphs and charts, then enhance the data story through images, video, illustrations, and sound.



**iMovie.** With iMovie, students can create Hollywood-style trailers and stunning 4K-resolution movies complete with titles, music, and effects.



**GarageBand.** With GarageBand, students have everything they need to make their own songs, soundscapes, and podcasts that show what they know through music and sound.



**Clips.** Students can create videos that capture learning quickly and easily for assessments, how-tos, and more. And Live Titles lets them add animated captions and titles—just by talking—that sync perfectly with their voice.



**Camera.** Front and back cameras allow students to shoot beautiful photos and cinematic videos, scan documents, or even create a floor plan using augmented reality.



**App Store.** Apps can transform the way students work, create, collaborate, and demonstrate their understanding no matter what career pathway they're pursuing. With so many apps on the App Store designed specifically for iPad, students can do things like turn data into stunning visualizations, turn their sketches into 3D models, or create, edit, and share building plans and drawings from anywhere.



**Apple Books.** From Multi-Touch books that include video demonstrations to books created for educators with ideas for supporting their students, thousands of engaging books are available on Apple Books.



**Powerful assistive technology built in.** iPad is designed for all learners and includes support for vision, hearing, motor skills, and literacy needs. VoiceOver is a gesture-based screen reader. Switch Control is powerful technology for anyone with extensive physical motor limitations. And Speak Screen, Speak Selection, and Typing Feedback provide reading support by adding an auditory component to text.



A man with a beard, wearing an orange safety vest over a dark long-sleeved shirt and green earplugs, is looking at an iPad. He is standing next to a large, dark jet engine. The background shows the wing of an airplane.

## iPad in business

Businesses across the world and in every industry are using Apple devices and apps to change the way they work. In fact, 100 percent of Fortune 500 companies use iOS devices. Following are some examples of how companies are leveraging Apple technology to solve business problems in creative and innovative ways.



# Architecture, engineering, and construction

Constructing a home, building, or road requires a lot of communication, problem-solving, and coordination. Project management can be complex when you consider the many types of work executed on a job site by contractors and other agencies; dozens of trades such as mechanical, electrical, or plumbing may be working at the same time. iPad can help with managing complicated tasks across groups in an easy-to-use and mobile format. It can help workers communicate and quickly solve problems, no matter where they are on a job site. And the built-in cameras, positioning technology, and other sensors can help collect new details on construction progress.

With iPad, professionals can easily perform tasks like collaborating on work orders, reviewing inspections, or even using virtual reality programs to conduct tests that might otherwise be difficult or costly. These innovative use cases save time and money while increasing worker safety and engagement.



## **Rogers-O'Brien Construction**

Rogers-O'Brien Construction is a Texas-based general contractor that offers construction management services.

Committed to customer service and quality, Rogers-O'Brien adopts new approaches and technology. The company uses iPad and iPhone to ensure that critical information gets into the right hands—instantly. Construction teams use iPhone and iPad to review blueprints, access interactive 3D design files, and manage resources on the job site. Keeping everyone connected with the right information means projects are completed on time and on budget.

“With the iPad I no longer have to worry about two different contractors working off of two different sets of drawings, and I’m able to easily communicate between different trades in the field and quickly solve problems wherever I am on the job site.”

### **Kevin Mulligan**

Senior Superintendent  
Rogers-O'Brien Construction





# Healthcare

Some of the most creative uses for iPad have come out of the healthcare industry—leading to faster response times, heightened communication throughout the system, more engaged patients and staff, and overall better care.

Doctors getting notifications on Apple Watch about the latest patient test results, nurses monitoring the blood pressure readings of an at-home patient with iPhone, and researchers gathering participants quickly for groundbreaking studies are all examples of Apple technology at work in healthcare.

Patients and their families can get up-to-the-minute information about medications, staff, and daily schedules with iPad devices in their hospital rooms. iPad devices are even given to children undergoing surgeries to distract and engage them. And new parents use FaceTime to connect with their babies in neonatal intensive care to make that crucial, early connection in their lives.

With more than 40,000 medical apps available on the App Store, healthcare professionals can get work done more accurately, securely, and efficiently, and ultimately provide a smoother path to healing.



## Ochsner Health System

Ochsner Health System, the largest not-for-profit academic medical center in the Gulf South, is an industry leader in finding new and innovative ways to take care of patients. The care needs of the population are changing at a rapid pace, and Ochsner has embraced new technologies and programs to meet these growing needs. Today, iOS devices, Apple Watch, and apps from Epic Systems are helping Ochsner Health System further its mission of delivering greater innovation in healthcare.

“At Ochsner, we continue to proactively engage our patients around wellness and prevention through successful digital connection. Innovations like Apple Watch, iPhone, and iPad are helping us to engage with our patients and help people live healthier, more productive lives.”

## Warner Thomas

President and CEO  
Ochsner Health System



# Manufacturing

iPad and custom apps can support every type of manufacturer to help them modernize traditional processes and grow their business. And they play an important part in the next generation of factory work. Often, smart factory and Industrial Internet of Things (IIoT) projects focus on connecting machinery, but it's critical to consider how to connect the workers as well. Using a mix of in-house and App Store apps, factory operators and supervisors have developed new ways to monitor equipment on the factory line, communicate with colleagues, and access reference tools and reports.

Not all IIoT devices are large machines. Manufacturers are also creating smart tools and other connected products that in some cases communicate with or extend the capabilities of Apple devices. These accessories and peripherals, as well as specialized enclosures and cases, are a critical part of creating new solutions for the industrial environment.



## SKF

SKF is a global engineering company that's transforming the manufacturing industry one bearing at a time. With iPad, SKF has reduced machine downtime and can now identify and fix potential problems before they happen. A collection of custom apps gives teams instant access to critical data, even when they're deep underground or in a steel pipe factory. SKF's custom iOS apps help employees at every level do things they never could do before. Machine operators on the factory line, sales and engineering teams in the field, and global customers who rely on SKF bearings can access critical business data in real time, communicate with colleagues and machines, and leave old tools behind.

"We are going through an industrial renaissance—an industrial change—faster than we've done before. iPhone and iPad give us a real opportunity to make even more change going forward."

### Tom Johnstone

Former Chief Executive Officer  
SKF



# Mac for career readiness

iPad isn't the only tool from Apple that helps prepare students with the skills they need for the modern workforce. Mac is a creative powerhouse that gives students new ways to be creative, collaborative, and productive—skills they'll need no matter what career pathway they choose.

Mac has been empowering the world's leading engineers, artists, scientists, designers, and musicians for decades. High-performance graphics and processors, advanced storage and memory, and breathtaking Retina displays all come together to run pro-level apps that prepare students for any career.

Mac gives students more opportunities to grow professional skill sets. Apple-designed apps like Final Cut Pro X and Logic Pro X are great for video editors and musicians, and qualifying institutions can get them at a special price.\* For coders, there's Xcode for building apps. And now educators who use Apple's free App Development with Swift curriculum can register to have their students earn recognition for their knowledge of Swift and Xcode. Certification is available through an exam administered by Certiport, and shows that students are ready to take the next step in becoming app developers. Note that fees for the certification exam will apply. See the [Certiport website](#) for more information.

Every Mac comes with powerful apps for productivity and creativity, including Pages, Numbers, Keynote, iMovie, GarageBand, and Photos, which give students a creative studio to explore and present any idea. Book reports and term papers look stunning, and spreadsheets become canvases for visualizing data. To take learning further, students can browse the Mac App Store and discover thousands more apps, including apps like Microsoft Office, Photoshop, and AutoCAD.

Mac does a lot. And when students use it with other Apple devices, it does even more. They can record a video on their iPhone or start an idea on an iPad, and pick it up on a Mac to make it even richer. iCloud safely stores all student documents, apps, and projects, keeping them up to date, secure, and accessible from any authorized Apple device.

\*Learn more about the [Pro Apps Bundle for individuals](#) and [Pro Apps Bundle for institutions](#).



# Resources

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

## Tools for Teaching

The Schoolwork and Classroom apps make it easy for teachers to guide how students use devices and apps in the classroom, distribute and collect materials, assign activities within apps, follow student progress, and gain valuable insight into each student's progress. [Learn more >](#)

## Apple Teacher

Apple Teacher is a free professional learning program designed to support and celebrate educators using Apple products for teaching and learning. Educators can build skills on iPad that directly apply to activities with their students and earn recognition for the new things they learn. [Learn more >](#)

## Apple Professional Learning

We want teachers to feel confident using Apple technology for learning and teaching. Our specialists are former educators who can support them with onsite coaching and mentoring that helps them design deeper learning experiences for each student. [Learn more >](#)

## Business success stories

Learn how businesses around the world are using Apple devices and apps to change the way they work. [Learn more >](#)

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