

# How iPad can help

iPad is ideal for students in the primary grades. It's small and light with a simple, intuitive interface that allows young students to undertake tasks independently. Direct interaction with content on iPad is highly engaging for primary learners. Even nonreaders can instantly interact with iPad—they can listen, watch, draw, record audio, take photos, and shoot video.

The built-in features on iPad, along with access to a breadth of included just-in-time resources, make it valuable for supporting young learners. iPad can transform into almost any tool students need—a camera, a book, a drawing canvas, a voice recorder, a math manipulative—the list goes on. And iPad doesn't just display the tools—iPad becomes them. The interface dissolves, and students use the tools through touch, voice, or movement.

iPad is also a helpful tool for primary teachers. They can record student observations to demonstrate academic progress and create content to enrich student learning experiences.

Early elementary programs provide rich learning opportunities that develop physical, social, emotional, cognitive, and language abilities. iPad—just one component of these learning opportunities—can be used to enhance current classroom strategies.

On the following pages you'll get a quick look at the built-in features on iPad that support students in the early grades. You'll also find examples of outstanding learning materials, as well as activity ideas and stories from schools that are using iPad to help their young learners achieve.

# Built-in features for primary learners

iPad includes many built-in features that can be used to support students in the primary grades. Here are some examples.

### Spoken text

With Speak Selection, students can highlight text and use the Speak option to have the text read aloud. Or while reading, they can hear an unknown word and continue to focus on the content. Learners can also use Speak Screen to read the entire content on a screen. This both increases their exposure to language and helps them proofread their written text.

Apple's proprietary text-to-speech voice, Alex, speaks the way people naturally talk. Alex is a contextual screen reader that actually reads a whole paragraph before beginning to speak. Alex knows when to pause and literally takes a breath, making it possible for young students to understand the text and its pronunciation.

With the typing feedback feature, students can have a letter or word spoken back to them once they've typed it. This confirms that they've selected the right letter or correctly spelled and written the word as they type.

#### Dictation

Thanks to the built-in microphone and Dictation, learners are no longer bound by being able to only write or type their thoughts. Allowing emerging writers to talk instead of type encourages them to write more, as well as to practice their speaking skills. Having students dictate a story or response first and then reproduce it—either in written or typed form—results in more in-depth thinking and richer language use. Letting them dictate their thoughts also allows teachers to assess metacognition—not just language development. Dictation works offline and doesn't require an Internet connection.



# Additional built-in features

#### **Communication tools**

Young students can use iPad to practice speaking and writing skills and interact with written text in a variety of formats. Here are a few examples.



Camera. With the Camera app and built-in still and video cameras, building fluency is fun for students. They can capture video of themselves practicing their reading or speaking skills, listen to their recording, reflect on their performance, and then rerecord as needed.



Notes. Writing in the Notes app using Speak Selection, predictive text, and Dictation lets students practice speaking and listening to written language. They can also make their thinking visual by sketching what they're trying to say, or practice their handwriting and share it in real time with their teacher or classmates.



Messages. Communicating via text chats using emoji, pictures, and video engages young learners and enhances communication within a secure and private environment.

### Personalized settings

With iPad, teachers can personalize settings for every student. For example, teachers can use the Guided Access feature to set time limits for students when using an app, lock them into a specific app, and make certain features inactive. They can also increase the font size on the screen to make it easier to read, set restrictions on volume limits, and restrict access to certain websites.

#### **Content creation**

Primary learners often need to demonstrate their thinking and understanding of content in ways that don't rely solely on written language. The built-in content creation apps on iPad help students scaffold through visuals, text, and other media. Students can even add illustrations directly in Pages, Numbers, and Keynote using Apple Pencil or their finger. These apps also allow teachers to create relevant, age-appropriate materials.



**Keynote.** Go on a photo scavenger hunt, then create visual vocabulary cards with drawings, audio recordings, images, animations, and video.



Pages. Use built-in templates to create interactive book reports that include images, videos, drawings, shapes, and audio recordings.



GarageBand. Record reading to improve reading fluency or capture students singing songs for learning language and patterns.



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



**Clips.** Create videos that capture learning guickly and easily for assessments, how-tos, and more. Using Live Titles, students can add animated captions and titles—just by talking—that sync perfectly with their voice.



# **Engaging learning materials**

A wide variety of learning materials are available for iPad that can engage students and help them learn in new and exciting ways. Many of these outstanding resources are also ideal for primary educators.

App Store. A vast collection of apps on the App Store help students improve literacy, numeracy, and social skills; record reading to improve fluency; and create content in many ways.

iBooks Store. Thousands of engaging Multi-Touch books in the iBooks Store are available for primary learners, including picture books, loved classics, readaloud options, and leveled readers. Many books have built-in reading tools, such as spoken text and instant access to dictionary definitions. One example is The Animal Book—which includes an embedded animal index and glossary, as well as other interactive elements that create an immersive reading experience.

iTunes U. This online catalog includes free education courses from top schools and prominent institutions worldwide. Much of this content is ideal for teachers, such as the Technology in K-12 Lesson Plans - K-2 course from the University of South Florida, or the Lessons for Primary courses, available from Apple Distinguished Educators.

iBooks Author. With iBooks Author on a Mac, educators and students can create their own interactive books for viewing on iPad. Teachers can develop materials personalized for students' own reading levels. Explore Just-Right Books at Their Fingertips: Authoring for Primary Readers to see how a teacher uses iBooks Author to create leveled texts for students.

# **Apps for primary learners**

Here are just a few examples of engaging apps that can spark curiosity in young learners.

#### Instructive



**DragonBox Numbers.** This app gives students the foundation for learning math by teaching them what numbers are, how they work, and what they can do with them.



Easy Music. Young students are introduced to the world of music as they explore a game world—learning to recognize notes, pitch, rhythm, and melody, and recording their own creations.



**Endless Reader.** Students have fun learning sight words along with their context and usage with the adorable Endless monsters.



The Human Body. Elementary-grade students can explore a fun, interactive model of the human body to learn what it's made of and how it works.



Sesame Street Alphabet Kitchen. Students practice early literacy skills by blending letter sounds to create words with this vocabulary-building app. The app can be combined with the Tiggly Letters manipulative to provide a hands-on, interactive, digital learning experience.



Todo Telling Time. These playful learning activities help children in preschool through second grade learn all aspects of time-telling through interactive minigames.



**Tynker.** This fun, engaging app introduces students to coding. They begin experimenting with visual blocks, then progress to text-based coding with Swift as they solve puzzles, build apps, program drones and robots, mod Minecraft, and make incredible projects.



My Very Hungry Caterpillar. Eric Carle's The Very Hungry Caterpillar is brought to life in this beautifully illustrated app. The wide range of interactive activities help students develop nurturing skills and encourages a love of nature. My Very Hungry Caterpillar is part of the StoryToys Jr. line, which includes many other apps designed for preschoolers.

#### Constructive



ChatterPix Kids. Students make anything talk by drawing a line to make a mouth on any photo and then recording their voices. They can bring vocabulary to life and then share it as a silly greeting, playful message, creative card, or oral report.



The Complete Fairytale Play Theater. Students create their own stories or retell fairytales with their own narration, choosing from over 60 characters and dozens of scene backgrounds and props to bring their stories to life.



**Explain Everything.** This app turns iPad into an interactive whiteboard for students to demonstrate what they've learned by combining visuals and narration. Teachers can create tutorials for students and use the app for formative student assessments.

### Manipulative



Tangible Play—Osmo. This series of apps uses the Osmo Game System and manipulatives for playing hands-on games with words, numbers, tangrams, coding, and more. Use with available Osmo lesson plans.



Tiggly. To spark curiosity and creativity, the Tiggly Learner Kit for iPad offers three award-winning learning systems that combine soft, colorful physical toys with digital apps. Students take a learning journey through early geometry, arithmetic, and literacy.

# Learning activity: Story retelling with the Three Little Pigs

Students can use apps on iPad to strengthen their math and language skills and reflect on their learning. Developmentally appropriate tools that provide opportunities for reflection can create deeper learning and more meaningful experiences for primary learners.

# **Objective**

Students practice their speaking and early math skills to recount a traditional story. They then direct their own version of the story in a fun and engaging way. They use Dictation to reflect on their experience.

#### Overview

In this workflow, students use Sago Mini Doodlecast to draw and record themselves chronicling the story of the Three Little Pigs using mathematical vocabulary: before, after, first, second, third, and so on. Next, they use Puppet Pals HD Director's Pass to recite the story using animation and narration. They then add their videos to a Pages document and use the audio recording feature to dictate a reflection on their experience of using apps to retell this classic story.





# Learning activity: Track reading fluency

With the right tools, monitoring and documenting reading fluency growth can be engaging and meaningful for your students. Recording reading progress and capturing data helps them self-assess and develop decoding and reading comprehension skills.

# **Objective**

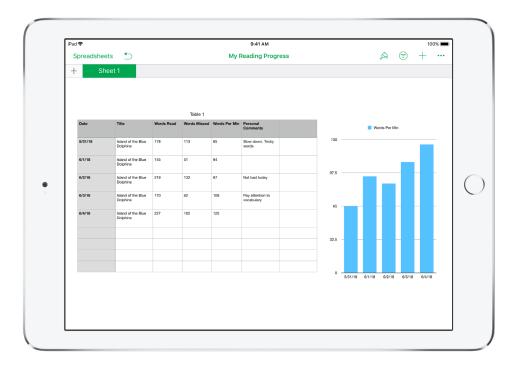
Using a spreadsheet and voice recordings, students are empowered to monitor progress over time through tracking and recording their fluency rate, expression, and errors.

#### Overview

In this activity, students build a fluency tracking system in a Numbers spreadsheet. Working with a partner, they'll read an appropriately leveled passage in iBooks while recording themselves in Numbers. Students are then able to quickly add self-assessment data to tables in Numbers that help them collect, organize, and keep track of learning progress. Additionally, students can set reading goals and monitor progress toward their goals.



To view the full lesson, download Enhancing Productivity with iPad from the iBooks Store. See pages 30-31.



# Learning activity: Design vocabulary flashcards

Students can use the built-in features on iPad to strengthen their language skills. Flashcards, especially when customized with visuals, context clues, and definitions, help primary learners personalize and streamline the process of acquiring new and difficult words.

### **Objective**

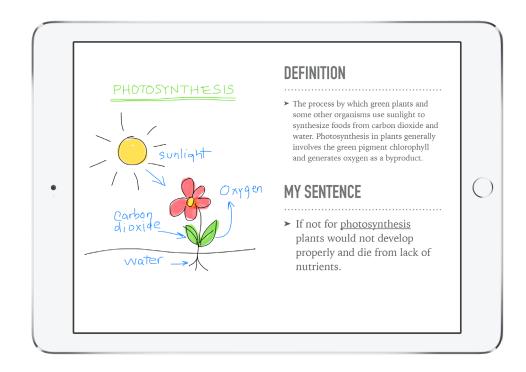
Students create their own support practices through vocabulary flashcards that can be duplicated and used for any subject area or learning concept.

#### Overview

In this workflow, students build a flashcard template in Keynote that can be used in multiple disciplines and shared with others. Once the template has been created, they can personalize each slide with their own text, images, audio recordings, drawings, and videos.



To view the full lesson, download Enhancing Productivity with iPad from the iBooks Store. See pages 23-24 of the book.



# Impact on learning

Educators are using iPad to inspire creativity and powerful, hands-on learning experiences for primary learners. Many schools are seeing great results by providing young learners with access to iPad and engaging learning content.

### Drayton Hall Elementary School, Charleston, South Carolina.

Drayton Hall Elementary puts students at the center of its classrooms with an iPad-based environment that fosters learning through apps, interactive lessons, and teacher-authored Multi-Touch books. Before iPad was introduced in Kristi Meeuwse's kindergarten class, about 35 percent of her students entered first grade reading above grade level. After bringing iPad into her classroom, 100 percent of her students have been reading above grade level for four years in a row. Kristi uses iPad to help teach the Common Core State Standards, which requires presenting nonfiction text to the class. Because of the limited number of nonfiction books available at the kindergarten level, she creates her own books, taking advantage of the Multi-Touch features of iPad to make them engaging for her students.

To learn more, subscribe to Kristi's Personalized Learning in Kindergarten course.

"For the first time in 22 years of teaching, 100 percent of my kindergarten students went to first grade reading above grade level."

Teacher, Drayton Hall Elementary School

Park Avenue Elementary School, Auburn, Maine. With 22 students in her kindergarten class, Amy Heimerl is challenged to teach at every level. So when the school district gave each of her students an iPad, she decided to try to create a custom learning experience for every student. And it turned out to be as simple as making folders. Amy put the same library of apps on every iPad. She then dragged appropriate apps into custom folders for each student. For example, in one student's math folder, she might put a number recognition app. Another student ready for the next level might have an addition and subtraction app.

Making folders of apps seemed basic, but it made a huge difference. When students pick up iPad to start learning, they just tap the right folder and go to work. Having tailor-made learning materials helps them advance much more quickly.

"Everything they do on iPad is completely self-checking, so they get that immediate reinforcement and can move along without my standing right there. They have the freedom to progress at their own speed."

Amy Heimerl, elementary teacher, Park Avenue Elementary

Escondido Union School District, Escondido, California. For eight years, Escondido has seen significant student achievement gains in reading comprehension. Escondido observed that students in their one-to-one mobile device classroom made nearly two years of progress in reading comprehension in just six months; a comparative classroom had just two-and-a-half months' growth in the same period.

# **Tools for teaching**

Many solutions are available that make it easy to guide the use of devices and apps in the classroom, get insight into each student's progress, and share student work.



#### Classroom

This versatile teaching assistant puts the teacher in charge of every iPad in the classroom, keeping students focused, even when they're working on different tasks. Learn more >



#### Schoolwork

Schoolwork is a powerful iPad app built to help teachers and students use the creative power of iPad. Teachers can distribute and collect assignments, assign activities within apps, and view student progress. They can also collaborate with an individual student and provide instant feedback, enabling them to tailor instruction based on that student's needs. And students have one place to see assignments organized by class and due date, submit work, and view their own progress.

Learn more >

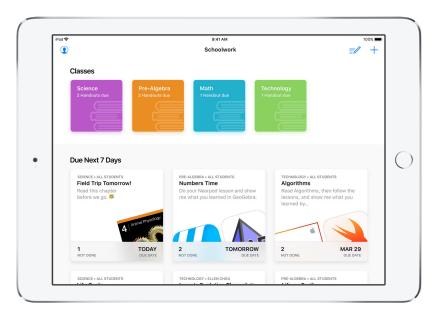


### **Apple TV**

With Apple TV, teachers can easily share student work by mirroring any student's screen to a TV monitor or projector. It's a great way to highlight student work, encourage collaboration, and involve everyone. There's also great content available on Apple TV for primary classrooms. Here are a few examples.

- iBooks StoryTime. Read-aloud narration and beautiful illustrations give young readers a different way to experience the classic kids' books they love.
- SketchParty TV. This high-tech drawing game is great for teaching vocabulary or just about any subject in the classroom.
- PBS KIDS. Television content—like full-length episodes and clips from PBS KIDS programs—is available on Apple TV.





# Resources

Apple provides many resources to help teachers learn how to use our products and integrate them into classroom learning. Here are some to get started.

#### **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 and Mac that directly apply to activities with students, earn recognition for the new things they learn, and be rewarded for the great work they do every day. Learn more >

### **Everyone Can Create**

Everyone Can Create was designed to give every student the opportunity to develop the skills and techniques they need to become the next generation of innovators, artists, and creators. It includes a versatile set of resources designed to help teachers infuse core creative skills into the topics and subjects they teach every day. Learn more >

### **Everyone Can Code**

Everyone Can Code includes resources to give anyone the power to learn, write and teach coding, from kindergarten through college. The Get Started with Code Teacher Guides are designed to help teachers bring coding into the elementary classroom using visual-based programming apps like codeSpark Academy and Tynker. The two Teacher Guides provide the support teachers need to help students in grades K–5 explore coding concepts and begin to think like coders. Learn more >

# **App collections**

A great place to start finding outstanding content is in the Preschool & Kindergarten and Elementary School collections on the App Store. They provide teachers with educator-approved apps to use with young learners.

### **Apple Professional Learning**

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

To learn more about Apple in Education, visit www.apple.com/education or call 1-800-800-2775 to speak with an Apple Education representative.

