



The image shows two iPads. The left iPad displays the home screen with a grid of app icons including Messages, Photos, Weather, Camera, Maps, Clock, Music Books, Calendar, Reminders, Notes, Newsstand, App Store, Game Center, and Settings. The dock at the bottom contains Safari, Mail, Videos, and Music. The right iPad displays the BrainPOP Science app interface. It features a teal background with the 'BrainPOP SCIENCE' logo at the top. Below the logo is a grid of science topics, each with an icon and a label. The topics include: UNITS, THE NERVOUS SYSTEM, CELLULAR LIFE AND STRUCTURE, EVOLUTION AND HEREDITY, WATER AND SOLUTIONS, BIOLOGICAL SCIENCE, ENERGY, EARTH SYSTEM, CHEMISTRY, PHYSICAL SCIENCE, SPACE, and WEATHER. At the bottom of the screen is a row of icons for different science fields: SCIENCE, SOCIAL STUDIES, ENGLISH, MATH, ARTS & MUSIC, HEALTH, and ENVIRONMENT & EARTH.

## Overview

iPad apps are expanding the learning experience both inside and outside the classroom, making it more interactive, immersive and engaging. And we know that when students are more engaged, they are more motivated and they perform better. With so many amazing education apps available — and more being developed all the time — there's no limit to the exciting possibilities for learning.

Tens of thousands of education apps on the App Store cover everything from maths and science to foreign languages and reading. Students can manipulate maths equations using just a finger. They can browse an interactive periodic table of elements. They can even dissect a virtual frog in one class, then flip through the world's greatest collection of art in the next. And teachers can deliver engaging lessons, monitor progress, get immediate feedback on students and stay organised.

## Getting Started

If you're just getting started teaching with apps, it's helpful to begin by setting goals for student learning. What must students understand? What should their interaction with apps look like? And which apps would work best for your specific lesson plans? You may find that choosing an app is easier after carefully considering what you want students to do with it, and why.

You might begin by exploring questions like:

- What parts of your lesson plans are you particularly passionate about? How could you best communicate that enthusiasm to students?
- Where do your students encounter roadblocks around a topic or lesson? What might help them get over these hurdles?
- What concepts or activities would you like to cover but don't have enough time? Can they be taught more efficiently or combined with others?
- What are the opportunities to gain insights into student learning through the content they create with apps?

The answers to these questions and the content in this guide can help as you begin to explore, choose and integrate iOS apps into your classroom.



## Selecting Apps

On the following pages are five key considerations and some questions to ask yourself as you explore, evaluate and select education apps.

### Engagement

As a teacher, you know what happens when students are deeply engaged. The classroom comes alive and motivation and retention are improved. To help evaluate an app's engagement level, consider:

- Is the app inviting and does it give a good first impression?
- Is the app intuitive?
- Is the app one that students will return to often?
- Does the app open up new ways to learn? How does it let students do things they haven't been able to before?

#### Featured App

##### [NOVA Elements](#)

Nova Elements engages students instantly with the option to browse an interactive periodic table, build atoms for each element and watch high-quality video narrated by *New York Times* columnist David Pogue. Students will discover something new each time they use the app, which includes videos to pique interest in chemistry by introducing concepts such as the world's most dangerous and scarce elements. The activities challenge students to create stable atoms for a variety of substances that constitute materials in the real world and get instant feedback. Students can also use the app as a periodic table and reference.



#### More to Explore



##### [NYPL Biblion: Frankenstein](#)

See how rare NYPL collection items still inspire storytelling today.



##### [Evernote Peek](#)

A learning app that makes studying fun, designed for use with the Smart Cover on iPad.

## Developmental appropriateness

In determining whether an app is developmentally appropriate, consider:

- Is the user interface age appropriate?
- Does the subject matter appeal to the intended year level?
- Does the design appeal to the intended level?

### Featured App

#### [Bobo Explores Light](#)

Bobo Explores Light introduces primary-school children to the wonders of physics with delightful experiments and kid-friendly explanations for complex scientific phenomena. With humour and gadgetry that appeal to this age group, Bobo the robot guides youngsters through hands-on experiments, videos, animations and trivia about topics such as lasers, lightning and bioluminescence. By investigating the physics of everyday things around them, the app effectively fosters curiosity about science in this age group.



### More to Explore



#### [ABC Play](#)

Award-winning series teaches children new words through sight, sound and touch.



#### [Smash Your Food HD](#)

A fun and interactive app that helps teach kids about eating healthily.



#### [Frog Dissection](#)

A cleaner, greener alternative for teaching dissection in the classroom.

## Instructional design

In evaluating whether an app's design meets your learning goals, you might consider:

- Does the app effectively communicate its subject matter?
- Does the app align to your learning goals for students?
- Does the app have a specific purpose and how does it achieve that?
- How does the app build on skills and guide the student?
- Are there relevant opportunities for feedback, assessment and reflection?
- Does the app offer personalised or adaptive features that are based on a student's skill level?

### Featured App

#### BrainPOP Featured Movie

BrainPOP Featured Movie showcases original, high-quality, animated educational videos organised by a broad range of subjects, from language arts and history to science and technology. The videos effectively illustrate concepts while also entertaining viewers. Students can examine hundreds of topics with a new video each day and are quizzed to assess and track their comprehension. The app also recommends related videos and content to explore.



### More to Explore



#### Algebra Touch

Enjoy the wonderful conceptual leaps of algebra, minus the tedium of traditional methods.



#### Chinagram — Chinese Writing

Discover the meaning and origin of over 120 of this language's most representative characters.



#### Explain Everything

Record annotations and explanations as you create interactive lessons, activities and tutorials.

## Motivation

Apps can help create a learning environment that keeps students motivated and engaged. You might consider these questions when determining whether an app meets your criteria for motivation:

- Is the learning content in the app the right level for your students?
- Will students want to go back to the app often?
- How does the app build on skills?
- Are gaming principles used?
- Do the methods used to motivate align with your learning goals?
- Does the app provide a bridge from the classroom to the real world for expanded learning (for example, via GPS, Wi-Fi or Bluetooth)?
- Does the motivational potential exceed the potential for distraction?

### Featured App

#### Project Noah

Project Noah motivates high school students to investigate the wildlife around them. With features for discovering and documenting nature and participating in a real-world scientific community, students can take, share and geotag photos of their wildlife sightings. They can label species themselves or get guidance from other users, and they can browse other users' spottings based on their locations. The app includes a game-like feature where students can earn badges by engaging in missions that are posed by real-world scientific institutions conducting biological research. The community and achievement-based features in the app help motivate students to return to the app regularly.



### More to Explore



#### Learn Spanish — MindSnacks

Six addictive games build essential vocabulary and conversation skills.



#### DragonBox Algebra 5+

Game-based learning introduces a new level of fun and enjoyment to mathematics.

## Accessibility

In addition to the accessibility features built into iOS, many apps can help reach students with special learning needs. In evaluating such apps, consider:

- Does the app include a range of levels for a variety of users with differing skill levels?
- Does the app support multiple learning modalities?
- Does the app let users personalise the user interface?
- Does the app take advantage of features such as VoiceOver or closed captioning?

### Featured App

#### [Proloquo2Go](#)

Proloquo2Go helps students with speech difficulties communicate using a natural-sounding text-to-speech system and a comprehensive library of over 14,000 words, symbols and conjugations. Learners at all skill levels can take advantage of the rich library of words to express themselves more precisely. The app supports a range of language skill levels with a customisable interface to meet the needs of multiple users. To make communication more efficient and natural, the app supports core and basic vocabulary groupings, advanced word prediction and vocabulary customisation.



### More to Explore



#### [The Social Express](#)

A special education app that teaches children and young adults how to navigate social situations with animated interactive lessons.



#### [Question Builder](#)

A reading comprehension app to help primary-school children learn to answer abstract questions based on inference.



#### [GarageBand](#)

This VoiceOver-compatible app lets students produce podcasts, record songs or learn to play an instrument.

## Enjoy the Adventure

Now that you have an idea of what to consider when choosing apps, where do you start? How do you find apps that are developmentally appropriate and will keep students engaged? Which apps will meet your learning goals, keep your classroom motivated and reach every type of learner?

One great place to start is right in the App Store. The handpicked, subject-focused [Education Collections](#) cover a wide range of subjects for a variety of levels and learning styles. For creating content, discover [iMovie](#), [GarageBand](#) and [iPhoto](#) — the iLife suite of apps from Apple. The iWork productivity apps, also from Apple, include [Pages](#) for word processing, [Numbers](#) for making compelling spreadsheets and [Keynote](#) for creating presentations. And plenty of third-party content creation apps, such as [Animation Desk](#), [Sketchbook Pro for iPad](#) and [Scribble Press](#), can help students communicate thinking and learning in new ways.

It's an exciting time of innovation in learning. We're seeing apps that provide engaging, Multi-Touch, rich experiences that were never before possible. Have fun exploring the amazing world of education apps.

## More to Explore

[App Store for Education](#)

[Education Collections](#)

© 2013 Apple Inc. All rights reserved. Apple, the Apple logo, GarageBand, iLife, iMovie, iPad, iTunes, iWork, Keynote, Numbers and Pages are trademarks of Apple Inc., registered in the US and other countries. App Store is a service mark of Apple Inc. Some applications are not available in all areas. Application availability and pricing are subject to change. Wi-Fi Internet access required for some features; broadband recommended; fees may apply. Content sold separately. Available on iTunes. The iTunes Store is available only to persons aged 13 or older in the US and many other countries; see [www.apple.com/support/itunes/ww](http://www.apple.com/support/itunes/ww) for a list of countries. Requires compatible hardware and software, and Internet access (fees may apply). Broadband recommended. Terms apply. See [www.apple.com/uk/itunes/what-is](http://www.apple.com/uk/itunes/what-is) for more information. L523172A-UK June 2013