iPad Apps & Ideas

iPad Apps for Education

To begin, if one considers the rich content and interactivity of the education based CD-ROMs of the previous two decades worthy education apps for the iPad are not plentiful. This is a great pity.

It would be a bonus for educators to see rich CD-ROM based education applications of yesteryear such as the Digital Frog series of science titles, Where In The World Is Carmen Sandiego and products produced by the Interactive Multimedia Learning Laboratory at the University of Wollongong, NSW, Australia, such as StageStruck and Exploring The Nardoo updated and ported to the iPad.

The iPad is the ideal environment for such rich education titles. Those titles all employed sound education principles to engage the students. Recently the excellent astronomy based CD-ROM Red Shift was repurposed as an iPad App. A number of classic games from the 1990s have been resurrected, brought up to date, and ported to the iPad. One can only hope that a similar fate awaits some of the excellent education CD-ROM tiles of yesteryear.
The Elements

There are some excellent education apps, however, they have a price tag to match. One such app is Elements created by Theodore Gray. It is a interactive book that allows you to explore each element of the periodic table in exquisite detail. The app is very useful for students and teachers as it provides an insight into how the elements are a part of our daily lives thereby adding a touch of relevance to the learning process. Data is hyperlinked throughout the content.

The app is beautifully designed and features excellent graphics that are three dimensional and beautifully rendered. The graphics can be manipulated by the user and viewed using 3D stereo glasses.

Unfortunately the text cannot be copied, edited or used, for example, as the basis of a school report created using apps such as Keynote, Pages or Quick Office. Some features, such as examining a detailed look at the atomic radius and crystal structure of each element, require an Internet connection.

Users can take “screen shots” of embedded imagery in the app using the iPad screen shot technique*. Once the captured image has been saved in the Photos app users can then import the image into apps such as QuickOffice, Pages, Keynote, Email and publishing apps such as Posterous, BlogPress, Blogsy, Evernote and Wordpress.

*One can create a screen shot on the iPad by simultaneously pressing and releasing the sleep/wake button and the home button. The screen will flash white and the sound of a camera shutter will be heard. The captured screen image will be saved to the Camera Roll in the Photos app.
MathBoard
This app features a series of multiple choice quizzes that test the user's skill with operations such as addition, subtraction, multiplication, division, squares, cubes and square roots. It is engaging and the user has an area where they can solve problems. Well designed and useful. Using this app I realised I had forgotten how to perform long division calculations! Shame!

Solar Walk
Solar Walk provides the user with an extraterrestrial armchair in outer space. The user can explore each heavenly body in the solar system and create their own interactive orreries that display planetary and lunar orbits in a way that no text book can. A must.

History Maps of the World
This app contains a selection of historical maps that trace world history in Europe and elsewhere. Each map has been scanned high resolution with an eye to detailed. The subject matter of many of the maps is rather esoteric and not all history classes would find them useful. As a teacher of history myself I am not a great fan of this app. The author has created 5 other apps, with additional maps, varying in price from $2.49USD to $9.99USD.

Merck PTE HD - Periodic Table
This is another periodic table of the elements app. It is well designed and is useful for teachers wishing to display the elements on the big screen. It is free as well. Students can perform stoichiometric chemical equations using the integrated molar mass calculator. Like the Elements app users can explore the history of each element as well. Looks excellent on the big screen.

Virtuoso Piano
This is simply a great app. It allows students to play a virtual and quite realistic piano. Different scales are available and the user is able to create opposing piano keys so that they can perform a duet using the app. The keys are coded and this is certainly a must have addition for any teacher of music or primary school aged children. It is free. Connect your iPad to some speakers for some real fun.
3D Sun
Astronomy is a popular subject with the education app category and for those studying solar astronomy this app is very useful.

It provides a range of views of the sun with live updates from NASA’s Heliophysics Division & live news updates regarding solar activity. For the app to realise its full potential a connection to the Internet is essential.

Proloquo2Go
This app saves parents of disable children costs mounting up to thousands of dollars if they wish to give their child access to a augmentative and alternative communication device (AAC). It incorporates a rich feature set and duplicates the characteristics of dedicated devices that cost up to $6000-00. An excellent app worthy the international accolades. It is suitable for children, and also adults, with autism, cerebral palsy, down syndrome, apraxia, developmental disabilities, stroke, or traumatic brain injury.

Star Walk for iPad
This is one of my favourite education apps. In my next life I shall be an astronomer. This app incorporates augmented reality technologies that allow the user to identify stellar objects and constellations in real time. It provides the user with an interactive and rich view of the night (and daytime sky). This is one of the classic iPad apps and proves beyond a doubt that the iPad has a well deserved placed in teaching and learning. A must.

The Fantastic Flying Books of Mr Morris Lessmore
An award winning interactive book that brings a whole new dimension to reading to all children, young and old. This is beautiful app with interactive screens, spoken audio and rich sound effects. The story is brought to life. The story is available in ten different languages as well. Absolutely brilliant and a perfect example of the iPad at its best.
Bobo Explores Light
This is a science based title for young people. The character Bobo explores a variety of concepts relating to light. Each section features interactive components and drop-down information panes. A little text intensive at times however reading never harmed a child. The student can save screens to the Photos app or email.

Little Star
This is an interactive book for young children. Each page has a series of interactive elements designed to engage the young readers. There are also games and other activities to capture the imagination of the readers. It is a well designed an entertaining title. The text is available in English, traditional Chinese and simplified Chinese.

DaWindci
This is a game that allows the user to explore differing environments via a hot air balloon which they need to pilot across open valleys and through narrow mountain passes. Your journey is into the unknown as you discover fantastic landscapes, weird technology and peculiar flora and fauna. This game based app can be a wonderful source of inspiration and problem solving activities for young students.

MapDraw
This is a route tracking and map-annotation app that lends itself to subjects such as geography, social studies, history and cultural studies. The annotated maps could be utilized to illustrate stories, to trace and label the routes of early explorers, create treasure hunts and label various characteristics of topography, urban transport, demographics and the built environment.
Working with documents

Documents can be created and processed on the iPad. Naturally, the iPad is a mobile device and the various text processing apps on the device cannot presently replicate Microsoft Office or Open Office applications on a desktop computer.

On the other hand, one does not need to seriously shorten the life of their eyesight and adopt the pose of a contortionist one attempts to complete a report on an iPhone or some other similarly sized handheld mobile device.

The iPad is reasonably adept when it comes to creating word processing and presentation documents. Worthy applications include QuickOffice, Pages, Keynote and Documents 2 Go. Let’s look at two such app: Pages and QuickOffice.

Pages

Document creation with Pages

When you initially launch the Pages app you are presented with a variety of templates. Templates include formal letters, project proposals, reports, recipes, flyers, brochures and the like. Choose the style that you require and the document will open.

Navigation

If you place your finger or stylus adjacent to the right hand margin of the document a navigation device will appear. This device will allow you to quickly scroll through the pages of your document with visual cues to assist you.

Placeholders

Your new document will include a number of images that are held in placeholders. You can replace the image by tapping it and waiting a moment for the contextual options menu illustrated at right to appear. You can replace the image by selecting a new image from the Photos app on the iPad. Please note that you can also cut, copy and delete the placeholder.
Placeholder styles
If you tap once on a placeholder and then select the Info button in the menu above you can alter the appearance or style of a placeholder. You can create a variety of border and image presentation styles.

Effects
Working in the same window you can also apply effects to the placeholder including Shadow and Reflection. A slider also allows you to alter the opacity of the effect.

Style options
If you select style options from the same window you can alter the appearance of the border around the placeholder. You can switch the border off if you wish.

Text styling
A wide variety of font styles can be applied to the text. You can apply heading, subtitle, caption, footer, header, bullet and label styles to the text. In addition you can change size, colour & font.

Bullets and tabbed insets
Still working with the text one can apply a range of bullet styles to the text including bullet, image, lettered and numbered. One can also tab or apply insets to the text.
Tools
Tapping on the Tools button reveals options to Find text, print the document, adjust the document setup, alter settings and to visit an online Help page for this app.

Layout
Selected paragraphs can be justified left, centre, right and both left & right. One can also create columns of text. You can switch the border off if you wish. Line spacing can be adjusted.

Printing options
You can use AirPrint technology to print directly to a suitably equipped printer. You can determine page range and the number of copies.

Settings
If you tap on the Tools icon you will have the opportunity to configure spellcheck, word count, centre guides and edge guides. The guides are very useful on the iPad.

Media
Tapping on the media icon in the menubar allows you to import photographs and images from the Photos app. Locate the desired image and select it.
Tables
Tapping on the media icon and then the Tables tab allows you to insert four different types of tables with a choice of six different colour schemes.

Charts
Tapping on the media icon and then the Charts tab allows you to insert seven different types of charts with a choice of six different colour schemes.

Shapes
Tapping on the media icon and then the Shapes tab allows you to insert 14 different types of shapes with a choice of six different colour schemes.

Document set up
Tapping on the Tools icon allows you to access the Document Setup window for the Pages app.

If you tap on the Document Setup menu item the window shown below will appear.
Simply tap and drag the document borders to meet your requirements. You can also make adjustments to the header and footer. Finally, in the event of an error you can always tap on the Undo button.
Keynote

Creating presentations with Keynote
When you initially launch the Keynote app you are presented with a range of templates. Templates include a variety of elegant styles that are difficult to choose from.

Choose the style that you require and the presentation will open.

Opening slide
When you have opened the presentation you will see a screen similar to the one at left.

There are a range of buttons across the top right hand side of the screen. They are described below.

Adding new slides
Tap on the + button at the foot of the slide viewer to choose a style for your new slide.

Placeholder styles
If you tap once on a placeholder and then select the Info button in the menu above you can alter the appearance or style of a placeholder. You can create a variety of border and image presentation styles.
**Effects**

Working in the same window you can also apply effects to the placeholder including Shadow and Reflection. A slider also allows you to alter the opacity of the effect.

**Style options**

If you select style options from the same window you can alter the appearance of the border around the placeholder.

You can switch the border off if you wish.

**Adding media and objects**

If you tap on the Media button at the top right hand of the screen you can add images, tables, charts and shapes in the same manner as set out for the Pages app.

**The tools button**

Tapping on the Tools icon allows you to access the various tools for Keynote. They are similar in function to the Pages app with a couple of exceptions.
Settings

The settings allow you to indicate slide numbers or not. As well, guides can be set at 10%.

The other functions are similar to Pages.

Presenter Notes

If you tap on Presenter Notes within the Tools item the window at right will appear.

Notes for each slide can be created.

Presentation Type

You can also modify the type of presentation that you showcase. Presentations can be set to loop and also to be self-playing. One should experiment with hyperlinks only to create game-based adventure or decision-making scenarios.

Enable Keynote Remote

If you wish to control your iPad Keynote presentation from another Apple device, such as an iPod Touch or iPhone, equipped with the app Keynote Remote, ensure that you have switched on Enable Remote in the Settings section.
QuickOffice

**Quickoffice** is a popular app that allows you to create, edit and share documents in Microsoft Office format. File formats include Word, Excel and Powerpoint.

You are able to import files from online storage facilities such as Google Drive, DropBox, Evernote, Box.net, SugarSync and Huddle.

Files can be transferred to QuickOffice via iTunes or wirelessly. As well, documents can be exported to online accounts with Scribd, Slideshare or DocStoc.

Selecting a document for editing

Quickoffice allows the user to create and edit Microsoft Word Documents. These files can be imported into QuickOffice via iTunes or via online file storage accounts with services such as Google Drive or DropBox.

When you open QuickOffice the screen shown below will appear. You are able to open documents already residing on your iPad or access documents residing on the Internet.

In the example below the user has accessed their **DropBox** account.
Settings

Tapping on the Settings icon located on the far right of the menubar will allow the user to change the following settings:

- **File transfers.** This can be switched On or Off and password security can be enabled. This feature enables wireless sharing of the QuickOffice documents. QuickOffice can be accessed from other computers by simply entering the appropriate URL into a server access dialog box on the computer.

- **File cache:** The user can set a file cache so that documents being accessed can be quickly and efficiently retrieved and edited.
Disable sleep. The user can disable sleep on the iPad.

Passcode lock. The passcode lock secures the app however I could not get this to function correctly.

Importing and exporting documents

QuickOffice allows the user to import documents from a number of online service such as Google Drive, DropBox, SugarSync and Huddle. Tap on the add file icon located on the lower right of the QuickOffice application window and log into the desired service. That particular service will then be listed in the document source column.

Documents can be exported from Quick Office to online accounts with Scribd, Slideshare or DocStoc. Simply select a document and drag it to the Export icon at the foot of the QuickOffice application. Documents can be emailed if they are dragged to the email icon and, finally, documents can be deleted if they are dragged to the trash icon.

Editing a document

When you open a document in QuickOffice it appears as the example shown at right.

Straightforward font styling and paragraph layout functions can be performed.

Images cannot be added to the document. Existing images cannot be modified.
The keyboard appears when you tap the cursor within the text. You are able to cut, copy and paste text by tapping and holding on a piece of text. A small magnifying glass will appear, allowing you to view the cursor and to make the selection once the pop-up contextual menu appears.

You can increase the amount of selected text by carefully dragging on the selection handles at either end of the selection. Once a piece of text has been selected it can be styled as bold, italicised or underlined by tapping on the appropriate icon at the top left of the screen.

**Printing & converting to PDF**
If you tap on the Print icon you will have the opportunity to print your document to a printer via AirPrint or you may save the document as a PDF file on your iPad.

**Fonts**
Tapping on the document settings icon in the menubar allows you to alter font style and size for selected text or the entire document.

**Colour**
Tapping on the document settings icon in the menubar allows you to alter font colour for selected text or the entire document.
Paragraphs and layout settings
Tapping on the document settings icon in the menubar allows you to alter paragraph and text alignment for selected text or the entire document.

You can also set indents, bullet points, numbered lists and tabs.

Find, replace and word count
Tapping on the magnifying glass icon on the menubar allows you to perform a find, word replace and a

Saving your document
In order to save your document tap on the close button located on the menubar. You will then be given an opportunity to save your document.

Working with Powerpoint presentation files

When you open a powerpoint document in QuickOffice it appears in a window similar to a word documents. Straightforward font styling and paragraph layout functions can be performed. Images can be rotated and enlarged.

The available functions in Powerpoint are similar to those available when working with a word document however you can also add images from the Photos app or from within the QuickOffice InBox as shown below.
You can also add shapes to your presentation document from the same menu item. See below.

QuickOffice Help

Clicking on the Question Mark icon on the main QuickOffice screen will bring up an online support and help page for the app.

You need to be connected to the Internet to access this help page.
Good Reader

**GoodReader** is simply one of the best value apps available for the iPad. This practical app allows you to perform the following tasks:

- Manage files on your iPad
- Transfer to and access files between Google Docs, DropBox, ftp servers, SugarSync and many other similar services
- Annotate PDF documents
- Batch upload files to servers
- Sync files to servers and transfer wirelessly to your computer
- View and open files in a range of different formats including doc, ppt, pdf, jpg and many others

This app is an absolute must for the iPad.
When you launch **GoodReader** the window above will appear. You can create folders for your files, download files from the Internet and access files stored on online servers or with hosts such as Google or DropBox. You can organise your files so that they mirror those on your computer. You can also perform text search.

You can perform the following actions on files in GoodReader:

- Copy
- Delete
- Move
- Rename
- Upload to a server or an online storage service such as DropBox or Box.net
- Create links to files
- Open files in another app
- Archive
- Star (favourite)
- Protect

You can also create new folders and new text files. You simply need to select and open the **Manage Files** tab on the right hand side of the file management window to make the changes. Select the files and/or folders that you wish to act upon. See the example illustrated above.
GoodReader allows you to view most file types. There is a wide array of actions that can be performed. A range of **tools** are available at the foot of each screen when you view a document or file.

You can annotate PDF documents. The examples above and below illustrates a range of annotation options for pdf documents including text, pop-up notes, lines, arrows, rectangles, arrows and freehand drawing. One is able to move, delete, edit, alter and erase the annotations as well. You apply borders, change colours and add fills.
When you view a file you are able to print, email or open the file using a different app on the iPad.

It is also possible to sync with servers on the Internet. An example showing DropBox is illustrated below.

Files can be transferred easily by setting up Good Reader on the iPad as a wireless enabled server. Activate the wireless server from within Good Reader by clicking on the **wireless icon at the foot of the screen**. Simply browse to Good Reader using your Network access on your Mac or PC.

You can use the IP address shown by the GoodReader app to connect to GoodReader on the iPad via your Mac or PC over a wireless network. Once you access GoodReader on your network it will appear as a folder on your Mac or PC. Simply drag folders from one device to the other. A transfer of two folders to the My Documents folder on Good Reader is illustrated in the screen capture below.
Another effective way to transfer files from an app on the iPad to your Mac or PC is to use an application such as **PhoneView** (Mac), **DiskAid** (Mac and PC) or **PhoneDisk**. Once the iPad is connected to your computer you can easily access Apps and file structure on your iPad. **DiskAid** is illustrated below.
Dragon Dictation

Dragon Dictation is an excellent speech to text voice recognition app. It works extremely well. The user must connect a headset with a built-in microphone in order to obtain the best results from this application. The user must also be connected to the Internet so that the speech may be processed.

The text can be edited and published to a variety of social networks or emailed. Text can also be copied and pasted into other applications such as Pages, QuickOffice, Wordpress, Blogpress and Notes.

In addition, notes emailed to a Posterous account, for example, will be published online immediately. This is certainly one of the most efficient ways to publish online.

It has the simplest of interfaces.

When you launch the app it simple asks you to tap and dictate.

It is best to use a headset, for example, the headset that is often sold with mobile phones.

As you are recording your voice there is an indication of sound volume levels.

You simply tap the screen to stop the recording.
When you complete your recording your voice track is analysed and the text is presented for you to check as shown in the window below. If you speak clearly and in an even tone the results can be quite good as shown.

Dragon Dictation improves over time as you repeatedly use the application. If you do not speak slowly or clearly into the microphone errors will be occur. You can make corrections using the keyboard.

Clicking on the download or share icon in the upper right corner will allow you to copy, email and broadcast the text via social media. You can also change settings.

Clicking on the information icon at the foot of the screen will display a floating window that provides information for better accuracy as well as voice commands for punctuation and spaces.
This is **SoundNote**. This app allows you to take notes and sketch diagrams whenever you wish.

It is stable and reliable. I personally have used it to capture key points and ideas during study days and conferences.

It is a straightforward and easy to use app. There are no complicated buttons or menus. I feel it takes less than two minutes to master.

My rule of thumb is that if a piece of software takes more than 10 minutes to master then the software designers have failed. If one needs to consult a manual then the end user has probably wasted their money.

While taking notes the user can record the spoken voice of the lecturer using the built in microphone on the iPad. I have recorded lectures while taking notes in large theatres and small and the quality of the sound has been excellent. Simply click on the Record button above to begin.
I recorded four separate presentations, each sixty minutes in duration, during a particular study day, and SoundNote performed flawlessly.

While you are typing your notes you can pause and sketch a quick diagram.

All one needs to do is select the pencil icon on the upper left side of the toolbar. When you have finished the sketch click on the keyboard icon on the toolbar to continue typing.

If you wish to review a part of the lecture clicking on the typed notes will take you to the correct sequence or point in the audio recording.

When you have finished with SoundNote you can transfer or publish the notes in a number of ways.

If you click on the share menu located on the upper right hand corner the toolbar you have three choices.
You may:

1. Email the notes
2. Email the notes together with the audio file.
3. File share the notes to another device and the audio to a DropBox account.

I have utilised all three methods and they work quite well.

Illustrated below are a sample of pdf files and audio files recorded during a series of lectures. Nearly five hours of audio were recorded during the presentations.

If you decide to email the notes together with the audio file you can actually email them to a Posterous account and create a blog post and an audio podcast on the fly. That is very useful. SoundNote does exactly what it is designed to do.
Some other Note Taking Apps

**Notes Plus**
Full featured, easy to use and allows recording of your voice and lectures as well.

**Penultimate**
A popular note taking app that features realistic handwriting strokes and styles.

**WriteNote**
This app features a wide range of settings and backgrounds.

**Wreck This App**
This is an anarchic and wild note-taking app suited for users with an artistic and free note-taking style.
WritePad

WritePad is a versatile handwriting recognition app. Like Dragon Dictation it works extremely well. The user needs to simply print or write clearly and the application seemingly translates the handwritten notes into typed text quite well.

The text can be edited and published. Text can also be copied and pasted into other applications such as Pages, QuickOffice, Wordpress, Blogpress and Notes. It has a rich feature set that is well worth exploring. It works best when used in combination with a suitable stylus. You can write directly on to the main window as shown below and the app will rapidly convert your writing to text.

If you wish you can type into a separate field and approve or disapprove the recognised words as you proceed. See below.
Hi there. I am writing this on iPad. It is quite easy to use. I have been trying to get the thing done.

write here

You can also use a keyboard to make corrections as per a conventional text editing app.
WritePad has a detailed array of settings designed to speed up its handwriting recognition as it “learns” your style. You can deploy shorthand and shortcuts to make the process more efficient.

Each of the options listed at right have a rich array of parameters. Explore each in turn.

Many require practice and are best explored via the use of trial and error.

You can also enter details for various social networking accounts and email.

Additional options allow you to set passwords, share files, autohide the toolbar, match case, set up folders, change theme colours and so on.

It is wise not to get too caught up in the diverse array of settings and simply use this app. It is practical and another quick way for some users to publish their ideas.
Hybrid Note Taking Apps

There are a number of apps that allow the user to split a screen between notes and a web browser page for example. This may be useful for students researching material via the web and taking notes at the same time. Two such apps include the recently released **Paper Helper** and **Side by Side**.

**Paper Helper**, illustrated above, has a rich text editor on the left and a web browser on the right. It is easy to use. Files can be emailed, printed or saved to a “cloud server”.

**Side by Side**, has a more complex interface, and allows the user to split the screen into four different components, including multiple browsers, notes and images.
PhotoPal

PhotoPal is an easy to use image processing application. The interface is easy to learn and apply. It only takes moments to master this well designed and fun application. When you open PhotoPal the following screen appears. Click on Photo Albums to choose a new image from the Photos app.
There are three sets of tools that you can work with in this application. Each of these tool sets are illustrated below and the best way to learn how to apply these tools is to experiment with each in turn.

When you have completed your work you can save the image and also forward on to others via email or publish it to the Internet using Flickr, Facebook or Twitter.
**PS Express** is a product of Adobe and is an app that is delightfully easy to use and free. When you launch the app the following screen appears.

Tap on the Select Photo icon in order to choose a photo or image from the Photos app. The photograph will open and like the PhotoPal app you have a range of tools to apply to the image. These tools include:

- Edit
- Light and colour
- Filters
- Effects
- Borders
Simply crop, straighten, rotate or flip the image as required.

Adjust the exposure, saturation, tint, contrast and colour by sliding your finger or stylus back and forth across the screen.

Adjust the focus, sharpening & noise as well as applying sketch effects colour by sliding your finger or stylus back & forth across the screen.

Apply special effects or borders to the image. Some examples are illustrated below. Additional filters & borders can be purchased in-app.
MindNode is a simple mind-mapping app that allows you to construct branching diagrams easily on the iPad, iPhone and iPod. You can share the mind-maps with others via email. You can also export it to MindNode Pro on the Mac.

When you launch MindNode your mind maps will be listed in the window that appears.

Simply tap on the mind map that you wish to open.

To create a new mind map tap on the + icon on the top right hand corner of the screen.
Art Rage

Art Rage is an excellent app based on its desktop equivalent. It is a full featured painting application that takes full advantage of the pressure sensitive characteristics of the iPad interface.

There is a diverse range of painting utensils available to the artist including brushes, highlighters, crayons, spatulas and others.

A rich and infinite colour palette is also available to the artist in addition to a variety of canvases and textures on which to paint.

**Utensil properties**

Artists are able to modify the size, pressure, thinners, loading and colour bleed of each utensil. The painting utensils interaction with the canvas.

**Brush presets**

A variety of brush presets are also available to the user. In addition artists can also create their own presets.

**Layers**

Users can create layers and as a result create a painting with a number of discrete elements which they can blend and float over the layers below.

**Saving**

The project can be saved and duplicated easily. Users are able to return to the gallery. There is also a helpful guide for users.
The gallery features all of the painting projects in Art Rage. The paintings can be duplicated, exported and deleted.

Tap on a painting to edit the painting project.
**Brushes**

**Brushes**, is a combination painting and image processing app. Users are able to import images from the Photos app and create layers of artwork and photographs.

It is easy to create collages and annotated photographs for export to other apps or publishing on the Internet. It has elegant and refined brush strokes that are highly sensitive to the pressure and style of the user.

**Layers** in Brushes are easy to set up. Layers allow you to work or focus on differing parts of the project without impacting on the original photograph or background.

Layers provide the user with a worry free environment in which to add labels, art and additional elements to a photograph without fear of ruining the original image. If one is not happy with the work on a particular layer then simply delete that specific layer. The other layers and the original image remain untouched.

Each time you import a new image a new layer is created. You can drag layers from left to right with the the layer on the far right be the uppermost or top layer. Layers can be blended with those below by applying the multiply, screen, overlay and color filter blending properties.

Layers can also be created, rotated, duplicated, repositioned, merged and deleted. The degree of opacity or transparency of one layer in relation to those below can also be adjusted. Merge related layers once you are satisfied with the product.

A maximum of 6 layers can be created.
Brush characteristics are a rich feature of this app. Naturally, this should be given the name of the app itself.

A wide variety of brush styles are available to the user.

Spacing, size and opacity can be varied according to user preferences.

Brush size and opacity can also be altered according to the speed of the user when painting on the iPad with their finger or a stylus.

Once you have completed the image you can export it to the Photos app, email the image, duplicate it, publish it to Flickr or delete it. You can also email all the actions that you applied to the image as a .brushes file format as a compressed .gz file so that the actions of the artist can be viewed in the Brushes viewer on a Mac. [http://www.brushesapp.com/viewer/](http://www.brushesapp.com/viewer/)
News Media Apps

**Eyewitness**
This app from the Guardian newspaper provides world class photography and photography tips on a daily basis.

**BBC**
The BBC news app provides access to news events, radio, video and photographic galleries.

**Reuters Galleries**
Reuters provides a rich array of photographs from around the world based on current news events.

**Life for the iPad**
This app provides historical images as well as media relating to current events from around the globe.

**Reuters News**
A rich array of news, views and photography from across the globe.

**TED**
Some of the best that the world has to offer in thought, wisdom, science, philosophy and wonder. All of this in a single app.
**Fotopedia**
This amazing app provides brilliant images of places of world heritage value from across the globe.

**Flipboard**
This magazine style app allows to subscribe to a wide variety of magazine style publications, news outlets and media feeds. You can also subscribe to social media sites and blogs. It is a must have app. This app takes full advantage of the iPad gesture driven interface.
Whiteboard HD

Whiteboard HD is one of the better “whiteboard” apps available on the market. This app allows you to share your whiteboard with other users.

It is actually a pleasure to use as it does not suffer from feature creep. It is easy to use and configure. Shared whiteboards are automatically saved to other user’s galleries.
Inspector 1
When you select an object on the whiteboard you can tap the inspector and perform a number of actions upon the object, including its layering and colour fill.

Inspector 2
The inspector also allows you to alter the position, size colour and, if text, the font of the object.

Projection
You can also project your whiteboards via a projection unit connected to the iPad using the VGA adapter dongle.

Selecting objects
When you tap on an object you can reposition and resize it. If you tap and hold a pop up menu will appear that will allow you to edit and modify the object.
Line parameters
If you tap and hold on either the line tool or freeform line tool you can modify the width, dash pattern and also the start and end points of each line.

Shape tool parameters
If you tap and hold on the shape tool you can select from seven different shapes.

Image source tool
Tap and hold on the Image Source tool in order to select photographs from your Photo Library, DropBox or Box.net.

Text tool
Tap and hold on the Text Tool in order to use the keyboard. You can change the font and also the size of the font.
Reel Director

Reel Director is a straightforward and easy to use video editing app. It allows you to import images, audio and video from other sources and simply mix them into a basic video which you can then save and export.

It is much easier to use than the official Apple iMovie app. Unlike iMovie this app allows you to import existing video clips. iMovie will only allow you to capture video from the iPad’s built in cameras.
Import and add media
Tapping on the “+” icon will allow you to import images, audio and video. You can also record audio.

Import audio
You can import audio from your iPod playlists. It is wise to use royalty free sound clips as opposed to copyrighted music tracks.

Recording sound
Tap the button to record sound and tap again to stop. It is wise to use a headset with a built in microphone for better sound quality.

Properties
Tapping on the properties icon allows you to compose a title and closing credits. You can also add transitions and re-encode all the clips.
Transitions
There are a variety of transitions that one can apply to the project.

Exporting
When you have completed the project you can save it to your camera roll, email the file or even upload it to YouTube.

Project menu
The project menu provides the user with a number of options:
- Delete: Remove the project
- Render: Render the clips, images and video into a movie
- Export: Export the movie to the camera roll, YouTube or email
- Play: Play and review the movie
- Compress: Compress the movie to reduce its file size
- Edit: Edit and make changes to the movie

Additional resources
The Apple iPad in Education:
Shortlink: http://wp.me/p1x5eb-js