



iPads *for* Learning

Getting Started

Classroom ideas for learning with the iPad

Resource booklet for schools



In their hands

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Development

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East Melbourne, Victoria, 3002.

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Introduction

1-to-1 is about learning, not technology. Students need a curriculum that meets the demands of an increasingly globalised and interconnected world in the 21st century.

The advent of Web 2.0, combined with a range of new technologies, enables teachers to create learning and teaching opportunities that develop the knowledge, skills and behaviours that students require in order to live, learn and work in the 21st century.

ICT-rich learning and teaching opportunities can increase student participation, engagement and achievement, and enable students to connect with experts and with other learners anywhere in the world.



Integrating 1-to-1 devices

Becta's (2009) research demonstrates there is a strong body of evidence to suggest that digital technologies can have a positive impact on learners.

Specifically, research shows that integrating digital technologies into the learning environment and embedding these technologies into teacher pedagogical practice can:

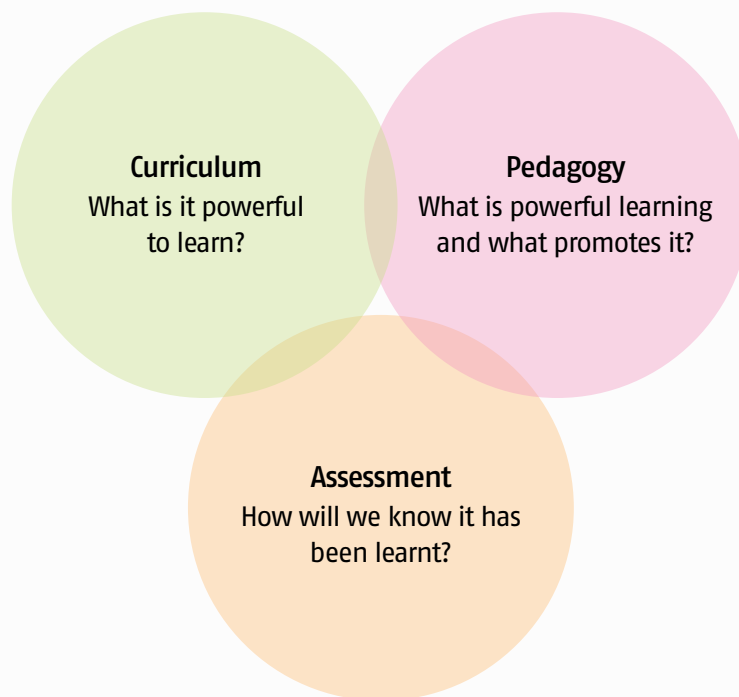
- positively impact on student engagement and motivation, including improving their confidence levels, attitudes towards their own learning, and behaviour as well as decreasing absenteeism
- promote improved opportunities for students to control the construction of knowledge and to learn through collaboration and conversation, and
- improve connections across sites of learning, and with the real world, through formal and informal online networks and access to global communities with expertise and perspectives that can enhance and enrich learning.

<http://publications.becta.org.uk/display.cfm?resID=41343>

This model shows a way of thinking about student learning that links curriculum, pedagogy and assessment. These links are important when considering the potential of 1-to-1 learning in the classroom.

New thinking about content, curriculum planning and pedagogy may be needed in order to exploit the full potential of 1-to-1 learning.

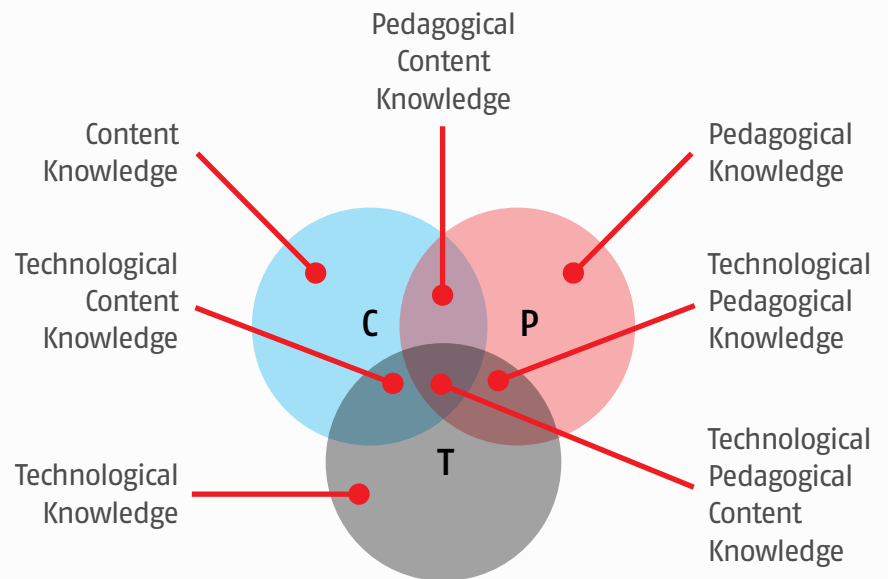
We should not be mapping the use of new technologies onto old curricula, rather, we need to rethink our curricula and pedagogies in the light of the impact that we know technologies can have on learning and meaning-making in contemporary times (Yelland, 2007).





TPCK Model

The TPCK (Technological Pedagogical Content Knowledge) model helps us think about how to develop technological pedagogical content knowledge. TPCK endeavours to capture some of the vital qualities of knowledge required by teachers for technology integration in their teaching. The approach sees three knowledge bases in isolation and highlights the new kinds of knowledge that lie at the intersections between them.



You can learn more about this model at the website:

http://tpck.org/tpck/index.php?title=TPCK_-_Technological_Pedagogical_Content_Knowledge

How to use this resource

iPads for learning is a professional inquiry for teachers

How can I integrate iPads to support powerful learning in my classroom?

How can using an iPad change the way I teach?

How can I ensure that the way I teach with ICT promotes deep learning?

How can I increase my skills when using the device and applications?

How can I ensure ICT is integral to my teaching and learning program?

These questions aim to challenge teachers thinking about curriculum planning and implementation. It is not intended that teachers work through this handbook systematically.

Rather, teachers can use it as a springboard to stimulate thinking, try ideas out in the classroom and share them with colleagues.

This publication provides a range of practical learning and teaching ideas to support the introduction of iPads in schools.

In a classroom with 1-to-1 devices (e.g. iPads, netbooks, notebooks), contemporary ways of learning can be optimised.

Students can be supported to:

- think, analyse and construct knowledge
- share and report back information through personal and collaborative spaces
- create avatars (icons which represent the user and his/her characteristics in the online world), movies, animations, podcasts
- evaluate and share opinions on apps
- discover and download information that interests them through detailed and advanced searches
- access distant experts, collaboration, mentors, communities of practice, shared virtual environments
- develop constantly as they respond to and develop new ways of learning as new opportunities arise.



Activities and ideas included in this resource

Shaping my thinking

The purpose of this section is to present a series of questions to help teachers reflect on the values and beliefs that underpin their learning and teaching practice. Some suggested uses for this section are:



Shaping my thinking

- as conversation starters for Professional Learning Teams
- as foci for peer-coaching sessions
- for reference when planning curriculum.

Ready, Set, Go!

Activities and resources that can readily be used in the classroom:



- **Working safely and responsibly using technologies** provides resources to highlight safe and responsible use of digital technologies
- **Begin your apprenticeship** provides a list of applications (apps) suggested for classroom use, and notes on what each app can do
- **Why not try?** Classroom ideas for you to try tomorrow are activities using a range of apps
- **Collaborating online**
- **What worked for you?**
- **Changing learning and teaching** Consider new learning opportunities you can plan and tips for classroom organisation.

All teachers are invited to share their learning and teaching ideas for incorporating 1-to-1 learning into their classrooms, and how they are using iPads for learning.



Shaping my thinking

Shaping my thinking

My values and beliefs

How will iPads make my students happier?

How will iPads make my students smarter?

What will my students find useful about having an iPad?

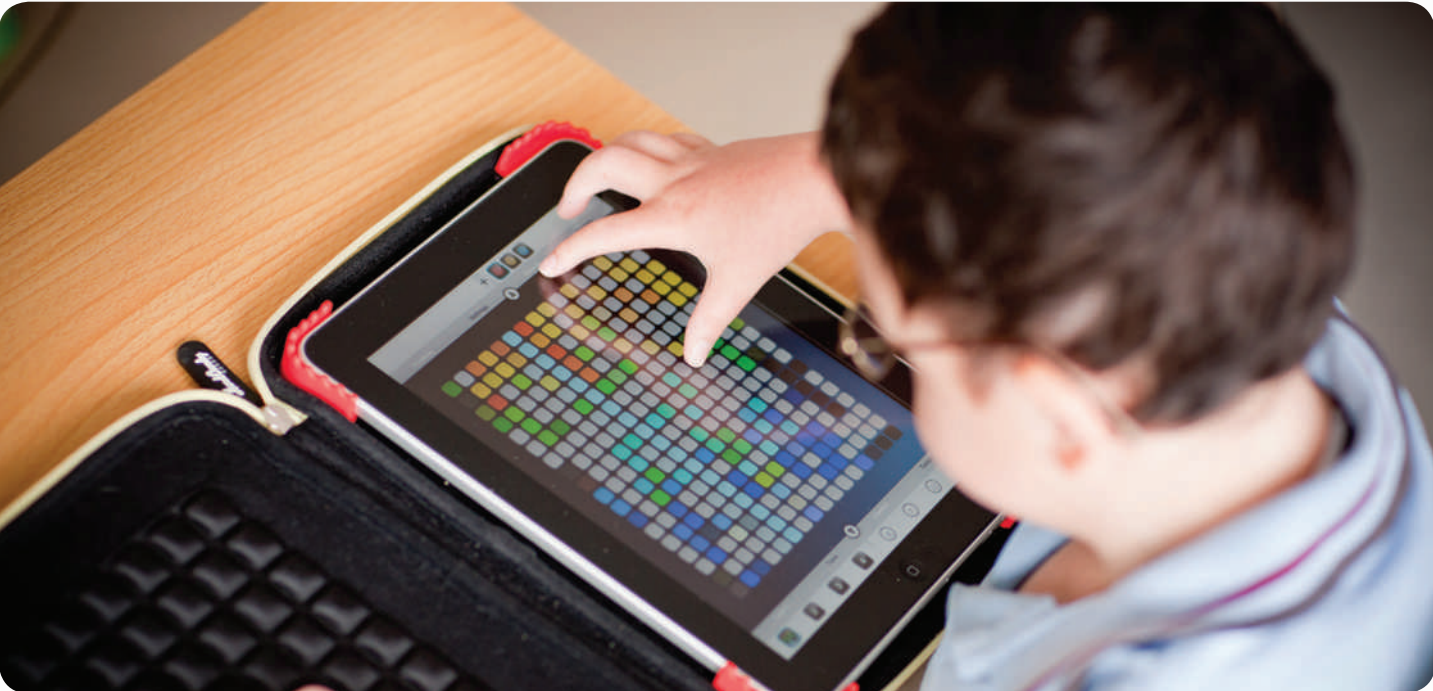
Purpose

These questions are intended to help principals and teachers reflect on the values and beliefs that underpin a 1-to-1 learning program. Some suggested uses for 'Shaping my thinking' include:

- 'conversation starters' for Professional Learning Teams
- as foci for peer- coaching sessions, or
- for reference when planning curriculum.
- Where can I start?
- How can I take my successful classroom strategies (what's working now) and use them to create a new way of working with 1-to-1 devices such as the iPad?

Questions to consider	Links for further information
What are my values and beliefs about student learning? What are my values and beliefs about the role of ICT in learning and teaching?	Curriculum Planning Guidelines: http://www.education.vic.gov.au/studentlearning/curriculum/preptoyear10/guidelines/default.htm Curriculum Planning Modules: http://www.education.vic.gov.au/studentlearning/curriculum/preptoyear10/modules/default.htm
Students How do I involve students in curriculum planning? Ask students: <ul style="list-style-type: none"> • What should teachers know about you? • What is important for you to learn? • How do you learn best? • How do you want to be assessed? • How can the Ultranet benefit your learning? • How can I best harness students' enthusiasm for iPads? • How can I build on the ICT skills, interests and experiences of students to optimise learning in my classroom? 	Curriculum Planning Modules – Facilitator's advice: http://www.education.vic.gov.au/studentlearning/curriculum/preptoyear10/modules/default.htm

Questions to consider	Links for further information
<p>Learning and Teaching</p> <ul style="list-style-type: none">• How does my current teaching reflect the capabilities described in the e⁵ Instructional Model?• How does my teaching framework – my values, beliefs and classroom practice – reflect 21st century learning?• How does it reflect the 'Principles of Learning and Teaching P–12'?	<p>e⁵ Instructional Model http://www.education.vic.gov.au/proflearning/e5/</p> <p>Principles of Learning and Teaching P–12: http://www.education.vic.gov.au/studentlearning/teachingprinciples/principles/default.htm</p> <p>Beyond Bloom – A New Version of the Cognitive Taxonomy: http://www.uwsp.edu/education/lwilson/curriculum/newtaxonomy.htm</p> <p>Challenge Based Learning: http://ali.apple.com/cbl/</p>



Questions to consider	Links for further information
<p>Learning and teaching</p> <ul style="list-style-type: none"> • What does my current pedagogy look like? (How do I teach?) • What does it look like when I am teaching with ICT? • How does it embed the e⁵ capabilities? • How might it look in my 1-to-1 classroom? • What is the potential for powerful learning in a 1-to-1 classroom? • What are my curriculum planning practices? • How do they reflect the integration of ICT? • How might they need to change to reflect learning and teaching with 1-to-1? • What are my assessment practices? • How do they reflect the integration of ICT? • How might they need to change to reflect learning and teaching with 1-to-1? • What learning and teaching strategies do I currently use to support the development of higher-order thinking? • What existing learning and teaching resources do I have (right now!) which I use regularly and will readily support a 1-to-1 environment? • What existing learning and teaching resources am I aware of (but not using regularly) that can support a 1-to-1 environment? • How could I use the Ultranet to improve the quality of students' learning? • What processes for permissions and protocols for intellectual property including copyright, and safe and responsible use of the internet are in place and followed across the school? • How might these need to be updated to reflect 1-to-1 learning? • How can we keep students and parents informed of new processes? • What do/can I do to support students to connect, collaborate or create? 	<p>Victorian Essential Learning Standards http://vels.vcaa.vic.edu.au/index.html</p> <p>Victorian Curriculum and Assessment Authority http://www.vcaa.vic.edu.au</p> <p>Bloom's Digital Taxonomy: http://edorigami.wikispaces.com/Bloom%27s+Digital+Taxonomy</p> <p>Classroom Instruction That Works: http://www.middleweb.com/MWLresources/marzchat1.html</p> <p>What makes a good inquiry unit? http://www.eqa.edu.au/site/whatmakesagoodinquiry.html</p> <p>Curriculum Planning: http://www.education.vic.gov.au/studentlearning/</p> <p>Intel® Teach Unit Plans: http://educate.intel.com/au/ProjectDesign/UnitPlans/index.htm</p> <p>ICT Domain: http://www.education.vic.gov.au/studentlearning/teachingresources/ict/default.htm</p> <p>Cybersafety: http://www.education.vic.gov.au/cybersafety</p> <p>Smartcopying: http://www.smartcopying.edu.au/scw/go</p>

Questions to consider	Links for further information
<p>Professional Learning</p> <ul style="list-style-type: none">• What existing ICT skills and understandings do I have which are readily applicable to 1-to-1 learning?• How can the use of ICT support development of my e⁵ capabilities?• For each of the e⁵ domains, where am I at?• What skills and understandings do I need to develop?• Have I reviewed my ICT capabilities on the ePotential continuum?• What are my ICT professional goals?	<p>ePotential ICT Capabilities Resource: http://epotential.education.vic.gov.au/</p> <p>e⁵ Instructional Model http://www.education.vic.gov.au/proflearning/e5/</p>





Shaping my thinking

Shaping my thinking

K-W-H-L chart – iPads for learning

Write down what you **KNOW** about learning and teaching with 1-to-1 devices such as the iPad in the **K** box. Then write down what you **WANT** to know about learning and teaching with 1-to-1 devices in the **W** box. In the **H** box, write down **HOW** you found the information. Complete the **L** box to show what you have **LEARNED** about learning and teaching with 1-to-1 devices.

What do I **KNOW** about learning and teaching with iPads and other 1-to-1 devices?

K

What do I **WANT** to find out about learning and teaching with iPads and other 1-to-1 devices?

W

H

HOW will I find this information out?

L

What have I **LEARNED** about learning and teaching with iPads and other 1-to-1 devices?

Ready

Set

Go

How can I regularly integrate a focus on using the internet safely and responsibly in my classroom program?

How can these cybersafety processes be reinforced through our home-school partnerships?

Ready, Set, Go!

Working safely and responsibly using technologies

Cybersafe classrooms

The internet offers enormous benefits for learning, teaching and socialising. Web 2.0 technologies offer great opportunities for students and teachers to contribute to the web. Blogs, personal spaces such as MySpace and Facebook and instant messaging tools such as Messenger are now part of students' life on the web.

Students can:

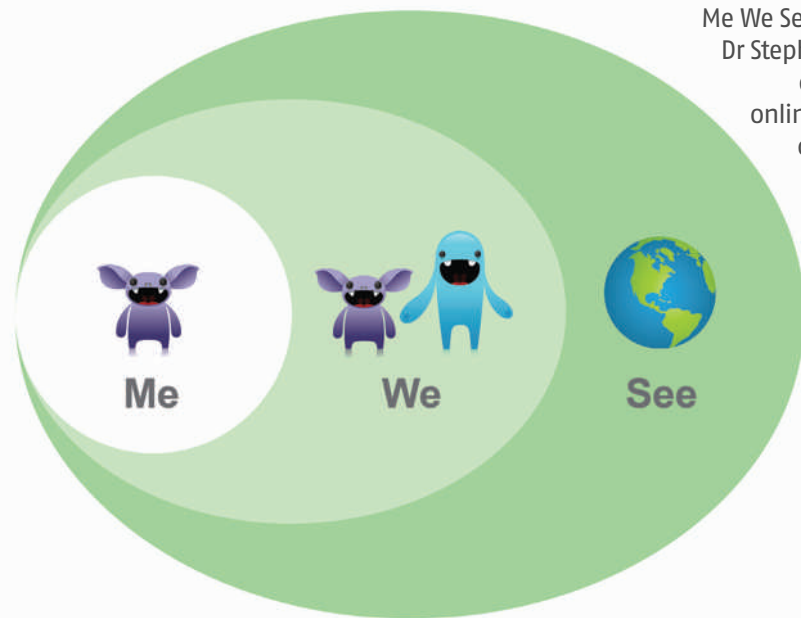
- virtually explore the world online
- visit museums and libraries around the world
- access rich, multimedia information resources to support research and investigations
- connect, communicate and collaborate with people all over the world
- create and publish to the web.



The wireless capacity of 1-to-1 devices such as the iPad will enable students to access the internet for information and research and to connect with their peers for communication and collaboration. With this increased capacity to connect comes an increased need for students to understand the ethical and legal (including privacy and copyright) considerations for safe and responsible behaviour online.

Teachers are strongly encouraged to familiarise themselves with the resources available at this site www.education.vic.gov.au/cybersafety and to highlight safe and responsible use of the internet as a regular part of their learning and teaching program.

Me We See



Me We See is based on Dr Stephen Heppell's description of online spaces and communities.

When we publish or share work with digital technologies we need to consider who sees it.

Me We See is a simple description of the spaces that we can work in.

- **Me** is a personal, private space, only you can see such as on your iPad or netbook.
- **We** is a community space that is secure; you know the members and you have an identity known to others. We spaces include the Ultranet or school intranets.
- **See** is a space that will give you a world-wide audience and includes spaces such as websites and YouTube.



What does it mean to be safe online?

For students behaving safely online means:

- protecting their own privacy and personal information
- selecting appropriate spaces to work in and contribute to
- protecting the privacy of others (this can be sharing personal information or images)
- being proactive in letting someone know if there is something not quite right. At home this would be a parent or guardian, at school a teacher
- these principles of safety and responsibility are not specific to the web but certainly apply to the use of internet at home and school. Just as in the real world, the virtual world of the internet involves some risks. Schools need positive strategies that help to minimise these risks.

The role of schools

Schools have an important role in preparing students for these online communities, even though students may not access some online communities at school (e.g. MySpace and Facebook).

Students and teachers in all Victorian government schools have access to the Ultranet.

It is essential that teachers incorporate safe and responsible online behaviours as part of any lesson using the internet and Victoria's Ultranet. Being involved in online spaces requires students to behave responsibly – for themselves and others.

This includes:

- the language they use and the things they write and say
- how they treat others
- respecting people's property (e.g. copyright)
- visiting appropriate places.



Resources

Learning On Line

<http://www.education.vic.gov.au/management/elearningsupportservices/www/default.htm>

Provides advice for schools on cybersafety and the responsible use of digital technologies.

My Digital World

<http://www.education.vic.gov.au/management/elearningsupportservices/www/educate/tchlearn.htm>

Provides teaching ideas for safe and responsible use of digital technologies.

Smartcopying – Students and copyright

<http://www.smartcopying.edu.au/scw/go/pid/1016>

Information about copyright in simple-to-understand language.





Ready, Set, Go!





Begin your *apprenticeship*

An app (short for application) is a program that can be downloaded onto your iPad via the iTunes store – located on your computer or iPad – either by syncing or with wireless networks. There are also web apps which can be accessed through Safari, the web browser on your iPad. Explore the apps available on the iPad.

1. Start with the apps that come bundled with iPad.
2. Then branch out and take the Department selected apps for a test drive (purchased with the gift cards).
3. Browse the app store through iTunes on your Mac or PC (or directly on the iPad) and download some apps that match your interests: perhaps you're a keen artist or photographer and want to use the iPad to digitally create, manipulate or enhance your images, or perhaps you'd like to learn a musical instrument, there are dozens of apps to help.

Dive right in and see what's possible – with over 300 000 apps there will be many apps to help you and your students think, learn and create.

Bundled apps	What can you use it for?
 Safari	Safari is the iPad's web browser. It allows you to view complete web pages as they would appear on a standard computer. You can zoom into text or images easily for a closer look. You can have multiple pages and/or sites open at once using "tabbed" browsing. Text and images can be copied for use in other apps.
 Mail	Mail is an email app that allows you to access and manage all of your email. It will allow you to manage multiple email accounts e.g. you can sync your EduMail account to it, and also attach a Gmail or Yahoo account. Mail works closely with the Contacts and Calendar apps to make sure you are always organised.
 Photos	The Photos app organises all of the images on your iPad. You can create impressive looking slideshows from directly within the app. When an image is selected you can email it to someone, set it as wallpaper for your iPad, or 'copy' it for use in another app.
 iPod	The iPad is also a fully featured digital media player. The iPod app allows you to play your music, download and listen to podcasts and audiobooks.

Bundled apps	What can you use it for?
 Maps	<p>Maps draws on Google Maps to provide digital maps and satellite images of almost anywhere. Great for Humanities projects, or just taking a look at what your home looks like from space!</p>
 Notes	<p>Simple word processing and note-taking can be done using the Notes app and the onscreen keyboard. Notes can be synced via iTunes to your computer, or emailed to yourself for further polishing in a word processor such as MS Word, or Apple Pages (Pages is also available as an iPad app allowing a fully featured word processor on the iPad).</p>
 Calendar	<p>The Calendar app has the look and feel of a traditional desktop calendar, with the added bonus of being able to view day, week or month to a page. Entries made on the calendar can be set to automatically sync to an email account (such as your EduMail account).</p>
 YouTube	<p>The YouTube app brings to the iPad all of the rich learning resources that have been shared on YouTube. Need to learn how to use Photoshop – YouTube it! Want to bake the perfect souffle – check out a step-by-step video on YouTube!</p> <p><i>YouTube may not be available in your school.</i></p>

Selected apps

A range of apps have been selected to get you started...

On the following pages you will find a selection of apps designed to get students connecting, communicating and creating.

The Department selected apps build on the functionality of the iPad by providing a variety of tools for students and teachers to access to enhance their learning.

As part of the iPad for Learning trial, these selected apps will be explored to determine their teaching and learning potential. In addition, the trial will investigate their accessibility in a range of learning environments.




The apps are arranged into broad categories to provide a starting point for thinking about how they might be used by students, however many of the apps have multiple uses across a number of VELs domains.

Categories in the app selection:

- Personal/Organisational
- Collaborative/Visualising Thinking
- Creativity/Multimedia
- Arts
- Mathematics
- English
- Science
- Humanities
- News.







You will find further information on how to load and manage these (and any other appropriate apps) via iTunes in the *iPad Quick Start Guide*.

Selected apps






Personal/ Organisational apps	What can you use it for?
	Bento Bento is a personal database app. It allows you to organise all sorts of things: manage a project; track assignments; plan events; create a database of your students to make assessment time easier.
	Todo for iPad Todo is your personal planner, task manager and to-do list. Tasks can be synced with iCal or Outlook. This would make a great app for teachers to use as their work program or for students to use to keep track of projects and milestones.
	Good Reader Good Reader is a file transfer and reader app. Transfer files over wifi, or by syncing to iTunes and access PDF, DOC, PPT, XLS, audio and video files.



Selected apps




Collaborative/Visualising Thinking apps		What can you use it for?
	Corkulous	Corkulous is an idea board for the iPad. It allows you to collect, organise and share ideas using a virtual corkboard. You can place, arrange and rearrange notes, labels, photos, contacts, tasks, ideas, etc. The ideal tool for brainstorming activities.
	popplet	Popplet is the ideal app for sharing visual ideas; a place to collect and curate ideas. Use Popplet to: collect inspirational ideas; create galleries; record your thoughts; explore ideas.
	iDraft	iDraft is a drawing pad app with a few extra features. Lines drawn are touch sensitive so they have a real hand-drawn feel. Use this app to take notes at a conference or lecture, sketching your ideas on an infinite number of notepad pages. Your iDrafts can be sent to colleagues as an image or a PDF file.
	Adobe Ideas	Adobe ideas is a digital sketchbook which allows you to capture your ideas on the go. The app is also a vector-based drawing tool, allowing you to use a photograph as a layer – it can then analyse the image and develop a color scheme based on the image, which you then use to sketch/design over or around the base image.
	eClicker	eClicker allows students to provide real time responses to true/false, multiple choice, opinion, rating style questions posed by a teacher (or student) using eClicker Host. Data can then be analysed and discussed immediately, providing students with instant feedback.
	Idea Sketch	Idea Sketch lets you draw Mind Maps, concept maps and flow charts, and convert these into text outlines (and vice versa). The ideal app for brainstorming ideas, illustrating concepts, making lists and outlines, planning presentations and more.

Selected apps

Creativity/ Multimedia apps		What can you use it for?
	Pages	Pages is a fully featured word processor and page layout tool. Perfect for creating rich documents, such as book reports, school projects, advertising brochures, concert posters, invitations, etc. Pages allows you to edit and save your documents in MS Word format or as a PDF, making sharing a breeze.
	Keynote	Keynote helps you to create stunning slideshow presentations. Build a portable slide presentation to share with others on the plight of refugees, or perhaps take a look at issues of global poverty – grabbing images from news apps or websites on the iPad, or create animated graphs and charts from data you have researched. Keynote can read and edit PowerPoint files, and slides can be exported as PDF files for printing.
	Numbers	Numbers is a fully featured spreadsheet tool, with everything you need to organise data, perform calculations and manage lists. Numbers also allows your charts and data to share the screen with text blocks and images to create compelling data-driven packages.
	ReelDirector	A complete video editor for the iPad. Create digital stories from still and moving images, including titles, transitions, and “Ken Burns” pan and zoom effects on images.
	Caster Free	Create and publish podcasts directly from your iPad with Caster Free. Multitrack audio editing, cut, copy, paste functions. Gather vox pops on a school excursion, and edit the podcast together on the bus home!









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Selected apps






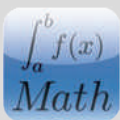
Creativity/ Multimedia apps		What can you use it for?
	Strip Designer	Turn your photos into entertaining comic strips. Add text balloons and boxes to your pictures. Give your photos a hand-drawn effect to make them look like a real comic book.
	Puppet Pals	Pick some actors and backgrounds, drag them onto the stage, and hit record. Your movements and audio are recorded in real time for playback later.
	PhotoPad by Zagg	Photo editing with a swipe of your finger. Crop, rotate, scale, edit effects such as, hue and saturation, etc.



Selected apps





Arts apps		What can you use it for?
	Pro Keys	Pro Keys is a multi-instrumental polyphonic keyboard and drum pad. Tracks can be played and recorded, a vocal track can be recorded at the same time – perfect for budding singer/songwriters. A mirrored keyboard mode means two musicians sitting on opposite sides of the iPad can make music together.
	Six Strings	Play electric and acoustic guitar, ukulele, steel drum on the iPad. Define the chords you want to play and then strum away, or pick out individual notes on the fret board. Get together with a couple of other musicians using both the Six Strings and Pro Keys apps and you have a complete band!
	Jam Pad	Jam Pad is a digital music maker at your fingertips. Play up to four instruments at once: piano, rhythm guitar, electric guitar, and drums! A great way to start your students journey into music making.
	Groove Maker	Need a DJ for a school function? Look no further; Groove Maker is the perfect app for creating non-stop electronic, dance and hip-hop tracks in realtime. Look and sound like a professional DJ by combining the 120 or so loops into a wall of sound.
	Beatwave	Visually exciting music generator. Tap out a pattern on the screen and beatwave turns it into a looping musical piece.
	Rj Voyager	Techno drum machines and dub sounds feature in Reality Jockey(RJ)'s Voyager app. Drop in sound modules then manipulate the sounds in the liquid environment of the Voyager interface.
	Draw Free	Sketch, draw, doodle, erase, draw on top of photographs. Simple, full screen drawing app.
	Draw	Draw is a simple to use app for sketching your ideas. It also has a couple of cool collaborative drawing-based games. You can also connect with other Draw users via bluetooth to work on sketches or games together.

Selected apps








Mathematics apps		What can you use it for?
	Quick Graph	Quick Graph is a powerful graphic calculator which takes full advantage of the multi-touch display on the iPad. Equations can be entered and edited easily; results can graphed in 2D and 3D in all standard coordinate systems. Results can be saved to the photo library or copied for use in other apps.
	Pocket CAS	Pocket CAS allows for quick and simple editing of equations.
	Math Board	Math Board is a great maths learning tool for students in the primary years. You can control the range of numbers you want to focus on, as well as the number of problems to solve, and even set a time limit if needed.
	Graphbook	Graphbook is a collection of 2D, 3D and 4D interactive graphing examples. Move, pinch and rotate graphs and fractals in real time.
	Jumbo Calculator	Jumbo calculator is great for anyone wanting the ease of use of a large buttoned calculator. Sadly you can't feel the exquisite texture of the large plastic buttons, and the solar panel doesn't actually charge it up, but otherwise it's the perfect calculator for adding, subtracting, dividing and multiplying.
	Math Ref	Math Ref is a mathematical reference app that includes over 1300 helpful formulas, figures, tips and examples of the equations and concepts.

Continued following page





Selected apps

Mathematics apps		What can you use it for?
	Polldaddy	Data gathering and statistical analysis has never been so easy. Design and create polls and surveys on the Polldaddy website, then access your surveys via the app and take to the streets (or the schoolyard) to gather responses. Sync your data to the website on your return and analyse the resultant data in a number of ways.
	Wolfram Alpha	Wolfram Alpha is described as a computational knowledge engine particularly useful with mathematical and scientific information, but is also a great starting point for research into all sorts of things – historical figures, visions, etc. Ask Wolfram a mathematical, statistical, socioeconomic, physical, chemical, linguistic question, and it will compute an answer.
English apps		What can you use it for?
	iBooks	The iBooks app is a digital book viewer. Download books from the iBook store (there are thousands of free, classic books available, and thousands more paid books coming soon to the virtual bookstore). The pages of virtual books can be turned with the flick of a finger, text can be highlighted and a definition checked, text can be read via the inbuilt accessibility features.
	Dictionary	The Dictionary.com app contains a fully featured dictionary and thesaurus, as well as a random word of the day.








Selected apps

Science apps		What can you use it for?
	Planets	A 3D guide to the solar system for aspiring astronomers. 3D renderings of the planets, shows rise and set times, moon phases, etc. 2D view of the constellations and planets. Information on the planets e.g. weight, atmosphere, etc.
	SPARKvue	SPARKvue brings real-time measurement, data visualisation, and analysis to the iPad. The SPARKvue app uses the internal accelerometer in the iPad to record and graph acceleration. The app can be extended to use PASCO sensors (via a bluetooth link) to record a wide variety of scientific data.
	Brain Pop	Learn something new each day with the Brain Pop movie of the day. Watch the daily animation on topics such as science, health or technology, and then work your way through an interactive quiz.
	Google Earth	Hold the world in the palm of your hand. With Google Earth you can fly to and explore the far corners of the earth with a swipe of your fingers. High quality satellite and aerial imagery of over half of the populated areas of the planet.
	Molecules	Molecules is an app for viewing 3D renderings of molecules and manipulating them using your fingers.
	Star Walk	Star Walk is your personal planetarium. Hold your iPad up to the night sky and the internal accelerometer and compass will show you the names of the constellations and planets that you see in front of you.
	Touch Physics	Touch Physics HD is a collection of 49 hand drawn levels of interactive physics-based games to play.

Selected apps

Humanities apps		What can you use it for?
	History Maps	History: Maps of the World is a collection of educational collection of high resolution historical maps.
	Wikipanion	Accessing Wikipedia has never been faster or easier. Wikipanion provides a clear, simple and searchable interface for Wikipedia entries. Rich content, such as maps, audio files, etc can be accessed from directly within the app, with images able to be saved directly to your photo gallery.
	World Factbook	The complete CIA World Factbook at your fingertips. Extensive information on more than 250 countries around the world. Includes maps and geographical information, population statistics, economic data, and so on.
	Wikihood	Wikihood analyses your location (or allows you to search for a location anywhere in the world) and then uses sophisticated data mining to access Wikipedia articles based on the location. The app provides information on landmarks around your location, and also information on historical figures in the local area.

Selected apps

News apps		What can you use it for?
	News Rack	The News Rack app allows you to gather news from all of your favourite blogs and news sources in one place using RSS (Really Simple Syndication) which is like subscribing to newspapers and having them all home delivered in one convenient and consistent interface.
	ABC for iPad	The Australian Broadcasting Corporation for iPad app brings together news, video and audio from the ABC into one convenient source. Watch 90 second news bulletins, read news articles, or listen to audio streams from ABC radio stations.
	BBC News	Get the latest breaking news from the BBC's global network of journalists. Search for news stories by geographical region or by category (e.g. business, technology, etc). Stories can be downloaded for offline viewing.
	Getty Images	The Getty Image app puts over 24 million professional images at your fingertips. Creative images are available for use in publications and presentations, and photojournalistic images can be used as great conversation starters for class discussions.
	Reuters News Pro	Access professional grade news and market data from the Thomson Reuters network. Video reports of important breaking news items. Simple interface for gathering and analysing news data and graphs, as well as traditional news categories such as sport, entertainment, health, etc.
	Guardian: Eyewitness	The Guardian Eyewitness app provides the world's most distinctive and provocative photographs, providing a daily, visual reflection of global events.
	AP: Associated Press	Personalised news to meet your needs. The Associated Press app keeps you up to date with what is happening in your home town, and across the globe. From within the app you read, share and save news stories of interest to you.

Ready

Set

Go

Ready, Set, Go!

Why not try?

Classroom ideas for you to try tomorrow

Ideas for everybody

FOCUS

Recording with Caster Free

Be creative with Caster Free and record and edit a range of sounds. How can you use your digital creations to complement other class-work? Ask your students to create sound-scapes for different situations.

Developing students' digital literacy skills by selecting which sounds will best enhance their creations

Wikipanion and Idea Sketch

Choose a topic and allow 60 seconds for students to read about the topic, and then use Idea Sketch to create a Mind Map, capturing and organising what they had learnt with in five minutes, Ask students to share their thoughts with the class.

Using ICT to organise, manage and summarise information

Comparing Todo and Bento

Compare Todo and Bento – ask students to make judgements and validate their choice of app. Which app do they prefer? They could complete a Venn diagram to show their findings.

Examining similarities and differences between the two tools and evaluate

Storyboarding with Strip Design

Ask students to use Strip Design to storyboard their response to a range of issues discussed e.g. in Health explore friendship, importance of sleep, or anti-bullying. Ask students to provide a health promoting response in six screens

Developing skills in summarising and sequencing key elements.

Todo and digital diaries

Ask students to use Todo to create digital diaries – this could be done at school or at home. You could ask a range of questions for students to respond to in their diaries. Great for reflection or self-assessment type activities.

Reflecting on changes in students' understanding through their experiences.

Provides teachers with an opportunity to use the diary as an assessment for learning tool

Continued following page

Ideas for everybody

FOCUS

Polldaddy

Need to survey the class? Create a class poll using Polldaddy and for the adventurous, include this poll in a class blog or wiki. How about surveying students about their thoughts about ways to improve their classroom. What ideas did they come up with? What were the most popular ideas?

Collecting aggregate data and also exporting to enable further analysis

Brainstorming with Idea Sketch

Brainstorm ideas for a design brief using Idea Sketch. Annotate your ideas to determine how you will address your brief e.g. in Health, brainstorm ways to reduce poverty. Identify which strategies could be done by individuals (including students), governments and non-government organisations.

Using ICT for visualising thinking



Ideas for The Arts

'Secret sound' fun with Caster Free

Sound effects are used extensively in music, films, advertisements etc. It can be very difficult to recognise a sound without having visual cues or knowing the context. Ask the students to play a game with a classmate, a group or the whole class by recording different sounds using Caster Free. You can actually record the real sound or try to reproduce it using props to help you. Some suggestions are: a kettle boiling, a printer, a train, a light switch, water running, tap dripping, paper tearing, a zipper etc. See who can recognise the 'secret sounds'.

Developing digital literacy skills by investigating how sound effects are used to enhance communication



Ideas for Civics and Citizenship

FOCUS

ABC News or BBC News

View the news over a few days and identify ways values such as fairness, tolerance, understanding and respect are depicted in the media. Compile your results in a spreadsheet (you could use Numbers) or as a concept map (you could use Idea Sketch).

Exploring values which underpin Australian democracy

Getty Images

Select an image from the gallery that depicts individuals engaging in cultural events in a responsible and active way. Ask students the following questions:

- What is happening in this picture?
- How do you know?
- How do the images capture the issue?
- What further research is needed after seeing the visuals?

Exploring concepts of democracy



Poll Daddy

Use the app to explore how and why people make decisions. As a class, discuss why voting is a key method for group decision making in a democracy. Ask students to consider if they have voted. e.g for school leaders. Ask the students to create their own polls and then consider the following questions: Is voting a fair method for decision-making? Why is efficient, quick and transparent voting important? What are some problems associated with voting? How might devices like the iPad and using an app like Polldaddy support taking surveys?

Participating in processes associated with citizenship such as decision making and voting



Ideas for Design and Technology

FOCUS

Planning your stories or projects using Idea Sketch

Planning is one of the most important parts of the writing process. Invite the students to develop a Mind Map using a program such as Idea Sketch to map their ideas and let their creativity flow! A good way to get started is to write the title of their story or project in the centre of the page, and then create three main branches off this central idea for the beginning, middle and the end, using three different colours. Sub-branches will radiate off these main branches as more details are added to the plan.

Using ICT to visualise thinking and to manage information



Refining design briefs using Idea Sketch

Ask students to read a design brief and come up with two options, identifying the considerations and constraints for each. Then ask the students to create a concept map representing their thoughts, using Idea Sketch. Ask students to share their ideas with each other and then to add any more ideas to their Mind Map. Ask each student to select which option they will follow and provide reasons for their choice. Are there any similarities or differences between their selections?

Using ICT to visualise thinking and to manage information



Ideas for Economics

World Factbook

Gather data about factors that influence health such as literacy rates for different countries. Compare these literacy rates with life expectancy? What trends are apparent? Why? Can you draw conclusions about developing and developed countries?

Exploring problems of global significance

Ideas for English

FOCUS

Strip Design and the class novel

Reading a class novel? Divide the novel in the number of parts that is equivalent to the number of children in your class. Ask each child to create a Strip Design page that reflects the key themes of their selected section of the novel.

Working collaboratively to analyse and summarise text and develop greater understanding through representing meaning of the text in a visual mode

Comparing the BBC News

Ask students to select a world news story. How does the BBC treat this news story compared with other international news agencies such as Reuters News Pro. How does the BBC app represent the story or issue? Go to the BBC website at www.bbc.co.uk/news/ and locate the news story. How is the news on the BBC app different to the BBC News website? Is the story repeated on the ABC News?

Identifying the ideas, themes and issues explored in a range of electronic texts

Getty Images and literacy

Ask students to select an image and answer the following questions.

- What do you think is happening outside the frame?
- How does the photo make them feel?
- What do they think happened five minutes before and five minutes after the photo was taken?
- What caption would you give this photo?

Developing skills in digital literacy

Ideas for Geography

FOCUS

Google Earth – around the world

Studying Geography? Google Earth allows you to navigate the world with a swipe of your finger. You can adjust your view to see mountainous terrain or browse the millions of geo-located photos from around the world using the panoramic layer. Select a country you are not familiar with and explore its geography using evidence from maps and photographs to support your explanations and draw inferences. Present your findings observing geographical presentation conventions. You can export images from Google Earth into other apps such as Keynote or Pages.

Interpreting information
on maps and photographs



Google Earth and me

Ask the students to use the Google Earth app as an orientation and directional tool when in their suburb, town or when on excursion. Ask students to evaluate how well Google Earth was at providing orientation and directions by completing a T-chart using Pages. Students could comment on what was good and what could be improved.

Interpreting information on maps
and photographs

Ideas for Health and Physical Education

FOCUS

WikiHood and health	Explore the community resources available to young people. Categorise each resource according to what support they provide: physical, emotional, mental and/or social health. You could use Pages or Idea Sketch to present your ideas.	Identifying local resources to support physical, social, emotional and mental health
Puppet Pals	Create a story about friendship using the moving characters and recording your voice. Brainstorm with students other ways to use Puppet Pals.	Developing students' digital literacy skills through health promotion
Discovering recreational resources with WikiHood	What recreational facilities are available for young people in your community? Were you surprised by the findings? How many of these resources were you aware of? How many of the resources do you use regularly? Identify the dimensions of health that are enhanced through use of recreational facilities. Use Idea Sketch to present your information.	Identifying local health services available for young people

Ideas for History

Strip Design and history	Ask students to use Strip Design to create a timeline outlining the sequence of a key historical event. After researching a topic from the History Maps app, challenge the students to include all the relevant facts and information, to demonstrate their understanding, in a concise manner by using Strip Design. Ask students to begin with a storyboard or plan. They could use a range of apps to plan including Idea Sketch, Corkulous, To Do or Bento. After completing their planning students can then create their comic or graphic novel.
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Analysing and describing key historical events



Ideas for Languages

FOCUS

Using Caster Free in LOTE

Ask your students to use Caster Free, and record a simple conversation in their selected language. Ask students to pair up and share their conversation with a classmate. Students could reflect on pronunciation, tone, intonation and metre in the conversations.

Using ICT to discriminate and apply pronunciation, tone, intonation and metre in conversation

Ideas for Mathematics

Excitement graph using Numbers

Develop a plot profile by determining the main events of a story. This can occur during the reading of the text as a means of summarising each chapter, or after reading to recall the significant events. Number the main events in the order they occur. Then rate the 'excitement level' of each event. This information can be entered onto a Numbers spreadsheet and a line graph created. The vertical axis recording the Excitement level (1–10, with 10 being the highest excitement level) and the horizontal axis using the number code to record the event.

Share your Excitement graph with peers and identify similarities and differences.

Summarising the text, representing information in a different format by moving from text to graph and then identifying similarities and differences to develop greater understanding of the story



Using Numbers

Collect data on purchases from the supermarket and / or green grocer, for example a shopping docket. Use Numbers to categorise the food, for example according to the Australian Guide to Healthy Eating and create a graph. Interpret the graph. How difficult was it to categorise the food? What improvements could be suggested in regards to food intake? What are the limitations of just using purchases from the supermarket and/green grocer? Ask students to write up a report of their findings or contribute their thoughts to a class wiki.

Collecting, classifying, presenting, analysing and evaluating data to inform their understanding of healthy eating



Ideas for Mathematics

FOCUS

Creating a chart using Numbers

Carry out a quick classroom survey to collect some data. Ask students to use the Charting tool to add rows and name labels to create a variety of charts such as bar and pie. Discuss the colour coding, size of section and how the data is presented. Ask probing questions to support students to analyse the data.

To developing an understanding of creating charts and selecting the most appropriate format to represent data

Ideas for Science

Star Walk in your backyard

Studying astronomy? Star Walk is one of the most amazing, high-quality, dynamic and realistic stargazing guide. You will find stars, planets, constellations and more with Star Walk. For homework, ask students to use Star Walk to show their parents or siblings some of the constellations, planets and stars in their backyard.

Using ICT to explore space



Planets- azimuth and altitude

View the solar system in 2D or 3D and learn about azimuth and altitude. Explain why azimuth and altitude are useful for sailors? When do you think knowing about azimuth and altitude will be useful for you?

Using ICT to explore planets in the solar system

Planets- comparing and contrasting

Explore the planets in more detail – rotate and magnify each of them to gain a greater understanding of their uniqueness. Select two planets and compare and contrast.

Using ICT to explore planets in the solar system

Touch Physics

Learn the basics of Physics by creating shapes to move the wheel and learn more about the laws of physics. Set a challenge for the students to complete several levels in the game. Who can take on the laws of physics to complete all 30 levels?

Learning about the laws of physics

Ready

Set

Go

Did you know that you can use an iPad to collaborate and establish communities?

There are many benefits of using blogs and wikis in the classroom; these benefits include enhancing collaboration, communication and knowledge sharing, knowledge building, increasing skills in analysis, synthesis, evaluation, storing, managing information and much more.

Global Teacher is the Department's blogging space for publishing and celebrating staff and student work to a global audience. It also exists to facilitate communication with schools and educational experts across the globe.

<http://globalteacher.org.au/>

The Department's A – Z of technology highlights information about technologies that are being used to enhance teaching and learning in Victorian schools. Classroom ideas and examples are included. For more information about these technologies go to: <http://www.education.vic.gov.au/studentlearning/elearning/technology/default.htm>

Ready, Set, Go!

Collaborating online

What is a blog?

A blog or web log is a website that has commentary (text), links, graphics and/or video added to it, usually about a particular issue or theme. Blog programs are usually free and quite simple to use. While a website is often a one-way form of communication, blogs are two-way (like other web 2.0 tools) as readers are encouraged to contribute by leaving comments.

A blog is usually maintained by one person with readers able to respond to posts by writing a comment. However blogs can also be collaborative. A central administrator (the teacher) should always moderate student blogs and comments. Student blogs should be added as links to a class blog for management purposes.

Classroom ideas for blogging include students:

- reflecting on their work throughout the year
- keeping a diary or journal
- creating pages for static information such as 'about me'
- using a range of resources such as photos and videos in discussions
- using threads to stimulate discussions.

What is a wiki?

A wiki is a type of website that can be quickly and easily edited by users. Wikis are often used to create collaborative websites about specific themes or topics. When you create a wiki you can decide on the level of security for your wiki.

Wikipedia is an example of a very large public wiki which can be edited by any user.

Classroom ideas for wikis include:

- setting up student pages for completing a group assignment
- Learning Portfolios that include photos, videos and other media to show evidence of learning
- putting class activities online.

Ready

Set

Go

Ready, Set, Go!

Changing learning and teaching

The wireless capacity of the iPad allows for flexibility in the classroom. Any time, anywhere access allows for changes in the way learning and teaching occurs.

Learning opportunities

What learning opportunities are possible? Think about a topic or inquiry focus you are planning. How could it be enhanced by incorporating iPads? When thinking about learning opportunities for your students, consider how you can use a combination of apps. In your planning think about the following:

- **Learning intention** – what will we learn about?
- **The task** – what are the tasks?
- **Evidence of learning** – what can we demonstrate to show that our learning has been successful?
- **Resources** – what resources will we need?

Tips for classroom organisation

With dozens of apps and internet access to multimedia-rich news and information sources, the possibilities are endless.