Chapter 1

Introduction

ICT IN THE SECONDARY CLASSROOM
SECTION 1

Today’s Presentation

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Section 1
What We’ll Cover

- Our Digital Learners.
- Contemporary (Digital) Literacies.
- ICT in the Secondary Classroom.
Our Digital Learners

It’s no secret that students of today are smart, tech savvy individuals.

We as educators face an ‘interesting’ road ahead as the learners we teach adapt and change the way that they learn, and...

...technology is a very large part of that.
A Vision of K-12 Students Today

“...This project was created to inspire teachers to use technology in engaging ways to help students develop higher level thinking skills. Equally important, it serves to motivate district level leaders to provide teachers with the tools and training needed in order to deliver quality instruction using technology.”
SECTION 2

Teaching the Digital Natives

“If we teach today as we taught yesterday, we rob our children of tomorrow.”

John Dewey
“There can be infinite uses of the computer and of new age technology, but if teachers themselves are not able to bring it into the classroom and make it work, then it fails.”

Nancy Kassebaum
Section 1

What Is Contemporary Literacy?

“The Melbourne Declaration on Educational Goals for Young Australians (2008) recognised that ‘rapid and continuing advances in information and communication technologies (ICT) are changing the ways people share, use, develop and process information and use technology.

In this digital age, young people need to be highly skilled in the use of ICT. While schools already employ these technologies in learning, there is a need to increase their effectiveness significantly over the next decade”.

Source:  
http://www.mceecdya.edu.au/verve/resources/
The skills sets below (Source: **FutureLab** 2010) were chosen to help guide teachers in developing learning activities to enable young learners to acquire contemporary literacy practices.

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<td><strong>1. Safe, responsible &amp; ethical use of digital technologies</strong></td>
<td>The learner can understand how to use technologies in a safe and responsible manner and any consequences to their actions</td>
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<td><strong>2. Collaboration</strong></td>
<td>The learner can use technologies to work collaboratively and develop team work skills</td>
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<td><strong>3. Creativity</strong></td>
<td>The learner can create outputs/represent knowledge in different formats using technologies</td>
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<td><strong>4. Critical thinking and evaluation</strong></td>
<td>The learner can use technologies to question, analyse, evaluate to gain understanding/new knowledge</td>
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<td><strong>5. Cultural &amp; social understanding</strong></td>
<td>The learner can recognise different social, cultural and historical influences in/using digital media</td>
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<td><strong>6. Effective communication</strong></td>
<td>The learner can use different modes (visual, audio, textual etc.) to represent meaning and express ideas</td>
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<td><strong>7. Finding and selecting information</strong></td>
<td>The learner can engage with different technologies to find information</td>
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<td><strong>8. Functional skills</strong></td>
<td>The learner knows how to use a range of different technologies</td>
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Digital Literacy across the Curriculum
What exactly is an eBook?

Well, obviously, an eBook, or Electronic Book is a book which comes in a digital format. Listed below are perhaps the most common eBook file formats.

Audio
This was perhaps the earliest form of an e-book (in the sense of a digital file). These were usually mp3 files that could be downloaded and placed on to various MP3 players and other devices.

PDF
The Portable Document Format (PDF), has been, and still is a very popular file format for an eBook. This format’s well known to PC users as the file is self contained, the page display is proportionally fixed, the document can contain active links to internet resources, or resources supplied within the PDF file (often on the same CD disc).

The advantage of PDF files is their ease of management and the way
most document programs can recognise them.

**E-Pub**
The most common new format is EPUB - a free and open e-book standard by the International Digital Publishing Forum (IDPF). EPUB files have become very popular as they can contain rich digital media such as audio files and low resolution film.

**Flash**
An Adobe Flash based e-book file. Flash was developed to display video on the Internet, however because it produces self extracting files, the definition of video now encompasses the entire screen display.

**HTML-5**
The latest format is an extension of standard open source web coding. Apple have released an i-Books Author desktop publishing package specifically to design and publish HTML5 ebooks. These are currently tightly linked to the Apple i-Bookstore, however this type of publishing software will be quickly copied by the open source community and the other major IT companies, opening up the distribution choices and options.
Applications (iOS / Android)

The eBook boom! App developers creating ‘Interactive eBooks’ for people of all ages. The ‘Interactivity’ of these has been a major draw card, especially with younger people. Great examples of these being notably the Graeme Base ‘Animalia and The Waterhole’ Applications for children and the ‘Here On Earth’ eBook (Tim Flanery), and Al Gore’s ‘Our Choice’.
“Teachers need to stop saying, ‘Hand it in,’ and start saying ‘Publish It,’ instead”

Alan November
The Australian Curriculum

Information & Communication Technology (ICT) Competence

Students also progressively develop skills in using information technology when conducting research, a range of digital technologies to create, publish and present their learning, and communication technologies to collaborate and communicate with others both within and beyond the classroom.

Australian Curriculum - General Capabilities

The Horizon Report 2011 K-12

“Digital media literacy continues its rise in importance as a key skill in every discipline and profession. The challenge is due to the fact that despite the widespread agreement on its importance, training in digital literacy skills and techniques is rare in teacher education and school district professional development programs…”

2011 Horizon Report K-12 Edition
The Technology can assist literacy outcomes by enabling the students to become the creator, rather than just the consumer. Allow the technology to foster creativity in students through having them create their own publications, let them be the authors.
There is no doubt that the iPad as a piece of Mobile Technology has created not only a positive shift in teaching and learning, but a positive shift in technology integration

Me...

( Corrie Barclay )
iPads = eBooks @ MLC

IPADS = E-READERS
“Teachers need to integrate technology seamlessly into the curriculum instead of viewing it as an add-on, an afterthought, or an event.”

Heidi-Hayes Jacobs
Section 1

Embedding ICT in the Secondary Years

In what ways can ICT assist me, and what types of things can students be doing? Here are 5 great examples:

- Blogging
- Social Media (Class Twitter Acc.)
- Podcasting
- Digital Storytelling
- Web 2.0
- Augmented Reality
A Blog (Web Blog) is a website usually moderated by one person. The ideology behind blogging was to give ‘people a voice’, in allowing them to share their thoughts, passions, and beliefs on anything and everything they wish.

Educational blogging can be a powerful tool. To allow students to create, publish and share their thoughts, ideas and work with the world is such a powerful thing.

Blogging is a great tool in assisting students to develop strong ties between what they do in class, and then sharing this with the world.
Kathleen Morris

2012 Victorian Primary Teacher of the Year

An example of the ‘Flipped Classroom’ Model for Yr 9, using a Global2 Blog
Section 3

Social Media (Twitter)

Twitter has proven itself to be one of the largest Social Media sites in the world. It’s ease of use and the speed at which people can share thoughts, images, links, etc... allows teachers and students to utilize its ability to let the entire school community know what’s happening not only in your class, but school as a whole.

As teachers you can update on the fly from a mobile device, or have a desktop/laptop permanently set up and logged in, for you to share all the excellent things you and your students are doing.

Have parents follow your class account and comment in real time about what you share.
Podcasting

Podcasts are essentially audio recordings by students that can be created on any number of topics.

Any voice recording software/device can be used allowing for students to record voice and share their reflections, thoughts and ideas.

You can usually listen to podcasts directly off the web from the people who created them. Another way is to "subscribe" to podcasts using software like iTunes.

These programs will automatically download the latest shows, and you can then listen to them on the device of your choice. To subscribe to a podcast, you need to know the RSS Feed, which will automatically download new podcast episodes.

“There are three kinds of podcasts. Audio podcasts are usually an MP3 file and are the most common types of podcasts. Enhanced podcasts can have images to go along with the audio. They can also have chapter markers, making it easier to skip to different portions of an episode. Enhanced podcasts are an AAC file and are not supported by all devices. Video podcasts are movies, complete with sound. Video podcasts can be in a variety of formats, but MPEG-4 is the most popular and the only format that will play on iPod and iPad.” Tony Vincent - [http://learninginhand.com/podcasting/](http://learninginhand.com/podcasting/)

Creating podcasts has a wide range educational benefits. Students can create podcasts to share with a potentially world-wide audience, and once again there in lies the power behind integrating this type of technology.

Podcasting Resource

[Integrating Podcasting Workbook - Simple K-12 Resources](#)
Ideas for Podcasting with Students...

- Having students reflect upon their learning at the conclusion of a lesson to demonstrate specific success criteria for a lesson or task.

- Students using podcasting to predict events, either in a text, for a lesson, or before going on an excursion.

- Older students subscribing to particular podcasts via iTunes and reflecting and reporting on these. Great for literacy.

- Students creating Podcasts for inquiry/integrated studies. I.e. Podcasting as a Australian Soldier in a trench during WW1.

- Students creating audio books for younger classes. Great for students to create an ‘audio library’. Focus on expression and speaking skills.

- During numeracy, incorporating mobile devices and students listening to directions given by another student via a podcast.

- For literacy students create a radio advertisement for a product. They also can create their own music via Garage Band or using something as simple as Isle of Tune.

- Students debating a topic in a group or as a whole class and embedding this on to a blog, seeking feedback.

- Students interviewing guests to their schools such visitors running incursions. These can become part of your eNewsletter.

- One for the teachers, when conferencing or completing running records for reading assessment, podcast the students reading and keep these over time. Great to give to parents throughout the year and use for parent teacher sessions!
Digital Storytelling

The emphasis with Digital storytelling is on personal voice which enables students to tell their own stories – blending together video, photos, music, narration, print, and sound effects using simple multimedia publishing and editing tools.

Digital Stories are such a powerful tool to engage literacy as the whole notion of film making is embedded with students having develop script and screen plays before constructing their films.

Students can sometimes find the notion of creating Digital Stories a daunting task as opening up about their life to others can be a frightening task for some however the end result, as they will attest, will be worth the process.

In saying this, Digital Stories can be created about topics on other subjects, rather than on the person who is creating them.

A List of the Best Free Digital Storytelling Tools for Teachers. - Educational Technology and Mobile Learning

Community Stories about People

A selection of autobiographical short films made in the Digital Storytelling workshop program at ACMI (Australian Centre for Moving Image, Melbourne).
Web 2.0

Web 2.0 is tools are internet based technologies centered around the idea that people should not simply consume from the internet, but also create from it.

There are hundreds if not thousands of Web 2.0 tools that can be used in an education context to assist student learning, especially in literacy.

Usually, Web 2.0 tools require a registration process however there are a number of excellent tools out there that overlook this process, allowing for students to create quickly and easily.

Web 2.0 Tools For Teachers and Students

Cool Tools for Schools

Go2Web20 Resources
Augmented Reality

“Augmented Reality, abbreviation AR, is becoming more and more apart of our life’s when using iDevices or mobile technology. Augmented Reality technology is combining real world images, videos, sounds etc with computer-generated information and/or imagery.

Within education, Augmented Reality can play a huge part in empowering, engaging and enriching student learning. It is a form of technology that can take learning to another level through its rich interactive approach of bringing the real world into the hands of students or simply making an image or title on a page come to life”.

Nathan Jones - ICTEV2012
Augmented Reality in Plain English
Chapter 5

Summary...

Give the students ownership and choice

Let them create, rather than always consume

Take risks with technology use within your own settings...

...and start a movement towards ICT integration in Education...
START A MOVEMENT
THANK YOU

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