Wheels for the MAKING

WIN AN

SHUFFLE

EWS

FREECOP

AUTUMN

2008



SHOUTING OUT

# TUDENT )ទ)៩ ដ





...

# PRODUCT ROUND-UP WHAT'S NEW IN THE WORLD ...



### Plumbing the depths

The human brain is a vast and unpredictable thing, but Novamind 4 Pro is one company's attempt to help chart its depths. 'Fantastic Voyage' it's not, but it can certainly help you on your own fantastic voyage. With loads of modes to help you brainstorm, integration with the rest of your Mac apps, and features like intelligent numbering and grouping, those seeking to plan out their ideas and projects will find its array of features keeps them on the right track.

Learn more about NovaMind Pro at www.nova-mind.com/Pro/ or buy it for around \$169. Express (\$55) and Platinum (\$282) versions are also available.



### Just the fix, ma'am

Just looking for an image editor you can use without the bulk of Photoshop? Consider Pixelmator, whose slogan 'image editing for the rest of us' pretty much says it all. Built around the open-source ImageMagick imaging toolset, Pixelmator includes 20 of the usual retouching tools, batch processing, 25 layer blending modes, 50 filters, granular mask editing, colour correction, metadata, Core Image support, a mode to capture iSight images straight into a new layer, and more - all for around \$68.

Visit www.pixelmator.com to learn more, download a trial, or buy it online.



### Learn something (later)

Yes, it's early in the year and you're probably less than eager to start quizzing yourself. Let Sol Robots' quiz-making tool take the pain out of self-motivation: easily make multiple choice questions, fill-in-the-blank, short answer, true/false and even essay questions. Add video, music, images or sound, publish them to the Web or even export them to your iPod for some deep contemplation while you dream about your summer on the beach.

Visit www.solrobots.com/quizpress for more information, to download a trial, or buy it for \$US49.95.

000	the other the	-
Reference Type: Buck		(1)
ather		
005		
Stie		
us; sofipeda.cor		
eries Editor;		
eries Title:		
Dity: ews.auftpedia.com		
whisher		

### Polish your references

If you've struggled through even one research paper and haven't tried Endnote, you're working too hard. With a name that sounds like a RAAF test rocket and a feature set to match, Endnote X1 will make your life easier by helping you find and track hundreds or thousands of references related to your latest paper. This latest version includes custom groups for managing subsets of your references, AppleScript support, and more.

Visit www.endnote.com to download a free trial. N.B.: Some university libraries offer EndNote to students for free; ask before you shell out \$US249.95 to buy it.



### A database for the rest of us

Filemaker has long been the premiere database for Mac users, but with time comes complexity. Aiming to make it easier for mere mortals to organise their data, Filemaker has launched Bento, which uses an easy drag-and-drop approach to organise Address Book, iCal and other information. Themes, templates, and loads of other features make one this worth a look.

#### Bento costs \$79.

See http://www.filemaker.com.au/products/ bento/overview.html or more information or to download a trial version.



### Office: Universal at last

It has taken a while, but Microsoft has finally released the Universal Binary version of its ubiquitous Office suite. Microsoft Office for Mac 2008 includes updated versions of Word, Excel, PowerPoint and Entourage as well as a host of complementary tools. The focus is on usability, with redesigned menus and heaps of document finishing tools. The Home and Student Edition costs \$229, but a full version (adding Exchange and Automator support) costs \$649 and the Special Media Edition (adding Microsoft Expression digital asset management system) costs \$849.

See www.macoffice2008.com for the rundown or your local dealer to buy.

# CONTENTS



- **Product Roundup** 2
- 4 AUC Update
- 6 Student Life: What does your iPod say about you?
- 8 Understanding vs learning
- 9 Shouting out loud
- New Apple Tech 10
- 12 The real measure of a student







- 14 The tangled Web they spin
- 15 Sticking to the script
- 16 Upwardly Mobile
- 18 All you need to know: RAM
- 19 Academic comment: Coming to terms with Generation Y
- 20 Create World 2007
- 22 The Joy of Tech
- 23 **Crossword Competition**

Wheels for the Mind is published by Apple Australia Pty. Ltd., Level 13, 255 Pitt Street, Sydney, NSW 2000 Apple University Consortium: http://www.auc.edu.au register online for a free subscription. Editor: Stephen Johnston

Editorial: David Braue, www.braue.com

Production: Allegro Graphics Design: Meehan Design

#### AUC MEMBER UNIVERSITIES AUSTRALIA:

- Australian National University
- Central Queensland University
- Charles Sturt University
- Curtin University of Technology Deakin University
- Edith Cowan University
- Flinders University of SA
- Griffith University
- James Cook University
- La Trobe University
- Macquarie University
- Monash University
- Murdoch University
- **RMIT University**
- Southern Cross University

- Swinburne University of Technology
  - University of Adelaide University of Melbourne
- University of Newcastle
- University of New England
- University of New South Wales
- University of Queensland
- University of South Australia
- University of Southern Queensland
- University of Sydney
- University of Tasmania University of Technology, Sydney
- University of Western Australia
- University of Western Sydney
- University of Wollongong

- Victoria University of Technology
- NEW ZEALAND
- University of Auckland
- University of Canterbury
- Massey University
- University of Otago
- Victoria University of Wellington Waikato University
- AFFILIATED UNIVERSITIES
- Australian Defence Force Academy
- University of Canberra
- Dr Mahalingam College of Engineering & Technology, Pollachi, India

# **EDITORIAL**



Happy New Year for 2008, which the Chinese celebrate as the year of the Rat, that their astrologers say, should be a very positive year for everyone. This can only be a good omen for AUC member universities and Apple. With the

introduction of the MacBook Air, together with the newly released Leopard Operating System, the higher education sector has plenty of reason for optimism.

In this edition, you will read student journalist Heath Fernance's engaging article on student life, and what your iPod says about you. It seems that you can tell a great deal about someone by the colours they wear. Check-out where you sit on the ipodoscope of personal preferences, and see how true it is.

But of course, education is our main focus, and personal learning preferences are critical in understanding how students absorb knowledge. A government study involving the University of Southern Queensland, Deakin University and La Trobe University are engaging students and exciting teachers with their findings which reveals how educators are discovering much more about the process of student learning and understanding.

The fascinating work being done by Dr Alan Cody and his colleagues, working within the Faculty of Biological & Chemical Sciences at the University of Queensland, tackles another aspect of student learning with new solutions in assessments that give a clarity never before available, using the Learning Enhancement Management System (LEMS).

But what goes on inside student's minds is only part of the picture. As a 'mid-term' academic, Dr Mark McMahon of Edith Cowan University comes to terms with generations Y & Z in his 'academic ramblings' and touches on themes that, I'm sure, will be recognised by the vast majority of his peers.

There's also an update by Carrie Osborne on cool new stuff for the upwardly mobile, which you can use with your Apple products.

Don't forget to read about CreateWorld 2007, which was held in December at Griffith University in Queensland. Now in its second successful year, it is firmly establishing itself as the anchor event for creative individuals across the national higher education landscape.

As always, if you are interested in getting more involved with the AUC, or would like to contribute in any way, just email me at any time.

s.johnston@ecu.edu.au

# AUC Update

# Outstanding scholarships for outstanding students

AUC funding has long been a major benefit of AUC membership, with funded projects producing all kinds of excellent results and helping to foster a vibrant Mac development community. That tradition will continue with the awarding this year of two major scholarship programs that will offer thousands of dollars in funding for selected students.

For students, the AUC Honours Scholarship program supports both part-time and full-time students currently working on Honours-year projects at AUC member universities. Worth \$4000 each, the scholarships are available to students in a broad range of disciplines, including sciences, humanities, engineering, arts, health and business – as long as those students are using Apple technologies as part of their projects.

The Honours Scholarship program also offers up to \$500 for attendance at a relevant conference, and a discretionary, additional \$500 completion bonus awarded to students who have excelled at their work. Recipients of this year's scholarships will be notified on March 17.

### For Developers

If software development is your thing, you may be interested in the AUC Student Developer Scholarships program, which offers up to \$10,000 over two years to support development of innovative Mac OS X software.

Up to three scholarships will be awarded. Each includes the loan of an Apple MacBook Pro for the duration; a one-year ADC Select Membership; an AUC student scholarship to attend this year's Apple Worldwide Developer Conference and the AUC's DevWorld Conference (with the possibility of also attending in 2009); and, for the most successful recipients, a chance at an internship with Apple at its headquarters in Cupertino, California.

Applications, which are due by March 14, will be assessed on a number of criteria including applicants' academic backgrounds, development experience, nature of the project, and passion for Mac development. For more information and to apply online, visit www.auc.edu.au/Student+ Developer+Scholarships.

Recipients will be announced on April 10.

# Training here, there, everywhere

The AUC's ongoing training courses have invariably proved to be big hits, with the sessions often filling up far beforehand. For example, the recent Xcode Tools workshops in Sydney and Melbourne were full by the end of January.

To improve the situation, the AUC is working with Dimension Data Learning Services (DDLS), a long-established IT training organisation, to increase the frequency of AUC training as well as its geographic reach. Specific dates have not yet been set, but once the schedule is developed, Dimension Data will be delivering a range of courses – including Mac OS X Support Essentials 10.5; Mac OS X Server Essentials 10.5; Mac OS X and Mac OS X Server Directory Services 10.5; Mac OS X and Mac OS X Server Deployment 10.5; Mac OS X and Mac OS X Server Advanced Administration 10.5.

Partnering with Dimension Data will ensure the courses are run more frequently throughout the year, as well as leveraging DDLS' network of training sites so we can offer training in Brisbane, Sydney, Melbourne, Adelaide and Perth. And while the courses will be open to the general public, the AUC will fund four spots for each university at a course of their choice, with additional spots available at healthy discounts. The AUC will also offer travel and accommodation stipends for attendees from regional universities.

As well as facilitating user training, we're continuing with plans to offer more courses for developers in areas including RealBasic, Core Animation, Core Audio and so on. Details of all this training are still being worked out – so stop by the AUC Web site (www.auc.edu.au) regularly to make sure you find out what's happening.

# At last: your own AUC

Every AUC member university has its own AUC co-ordinator, but you may not see him or her that often. That's why the AUC Web site now features sub-pages for each member institution.

Your AUC co-ordinator will use this page to keep you updated on the goings-on in the AUC that are relevant to your university. Check them out at www.auc.edu.au/members.

# Put your thinking cap on

We at the AUC love your creative ideas for projects incorporating Mac technology, which is why we run the annual Innovation Grants. Each year, a number of small (up to \$2000) and large (up to \$8000) awards support a range of innovative projects. This year, the grants – which will be open around April – are particularly targeted at innovative uses for the technologies introduced in Mac OS X 'Leopard'. Put your thinking caps on, and keep checking the AUC Web site (www.auc.edu.au) for details.

# We have the tech

Keen to get your hands on the latest Apple tech? We've got it here, ready and waiting.

As part of the AUC's ongoing evaluation program, we can offer AUC members three-week loans of the iPod Touch (5 units available), Apple TV (3 units), Airport Extreme (3 units) and, when they ship, Macbook Air (2 units). If you're eager to put these products through their paces, your AUC co-ordinator can help hook you up.

And don't forget: the AUC's Classroom-in-a-Box – which includes a gaggle of Macbook Pro notebooks, a bevy of productivity applications and everything you need to link them up – is still available, and in high demand amongst AUC members. If you're running one-off training or educational programs and need lots of computers fast, don't hesitate to get in touch.

# Conference watch

The perennially popular X World conference will make its return in early July this year. As well as sharing what is certain to be an information-packed agenda, some attendees will no doubt have much to tell about their experiences at Apple's World Wide Developers Conference (WWDC), to be held this year, as every year, in early June in the US.

Details of both events are still being finalised, but the AUC will reprise its offers of appropriate subsidies for students and staff of AUC member institutions. Details will be announced soon at the AUC Web site, www.auc.edu.au, so drop by regularly to stay up to date.

Something interesting happening within your university's teaching environment? We want to hear about it! Drop us a line at s.johnston@ecu.edu.au and we'll include the most interesting tidbits in the next issue.

# AUC Conference



AUC Conference

The AUC conference held September held at the Crown Plaza Royal Pines Resort, Gold Coast, was a tremendous success. With the theme of Contribute, Communicate, Collaborate – it certainly allowed delegates to do all three. Keynote speaker, Kenneth C Green, Director of the US Campus Computing Project, gave a engaging talk on the IT revolution in Education and looked at how it had developed over the past 20 years – and gave us insights in how it's likely to look in the future. Michael Ossipoff of Telstra, whose job is to identify and explain the trends in new technology, gave us a fabulous and entertaining vision of how the pervasive connectivity of the always-on generation, will change the way we work, learn and play in the 21st century. 'Presence' in the sense of always available resources, is likely to be the next major trend, with some analysts saying that it will be a major market component within two years. Nick Tate, Director of AusCERT, gave a detailed and incisive look at the Australian Access Federation, which will enable Australian Universities to easily share research and resources on a nationwide scale. And Carl Berger, Dean Emeritus at the University of Michigan, enraptured and thrilled the audience with the deconstruction of the 'Digital Native'. In his research he showed that multi-tasking works fine if tasks differ. Baby-boomer or Gen-X Students seem to be able to study and watch TV or have online instant messaging open. But he also found that the Digital Native's skills are wide but shallow. Many students can press a few buttons on the latest gadgets - but integration of these technologies or the application of them for learning purposes, seems to be outside their skillsets. Surprisingly, the percentage of people who were surveyed by Berger, according to his definition of Digital Native, were in the minority. It seems that the true Digital Native was a name given to what he suggest we should call the "Millenial Instructor" – who, typically, is a Faculty member and a student, adept at the new technologies, in-touch with students and a dedicated life-long learner. This new emerging teacher is one who understands the deeper

# ribute Communicate

implications of the underlying technologies and knows when and when not to apply them to learning. The resounding fact discovered in his research was that by far the vast majority of students thought that online learning was the least preferred of all the delivery mechanisms. This was compounded by the fact that they thought most of their professors did not know how to use the technology themselves. Perhaps the lip service paid to technology, or at worst a contempt for it by academic staff may have contributed to this. Also the time taken by students and staff to learn and master new technologies to proficiency was seen as too long and negated the value of the learning as this became an additional intellectual overhead to the knowledge trying to be gained by the teaching material itself. These findings will, no doubt, raise a few heated discussions among academics in boardrooms and staff rooms around the globe.

But there were many other topics which are too numerous to cover here – each one of them giving educators fresh new insights into all apects of the rapidly changing world of education. It was also an opportunity to thank two longstanding members of the AUC, Rob Osborn and Glenda Wardlaw for their outstanding contribution, hard work and dedication, over the years. So look out for the next conference in 2009 which will then go from being a biennial event to an annual one which is likely to become a major event in the Australian higher education landscape.

# STUDENT LIFE:

# WHAT DOES YOUR IPOD SAY ABOUT YOU?

There are two kinds of people on public transport: those who prefer not to engage, delighting in their quiet disconnect, and the others - the talkers.

Talkers relish any opportunity to talk, usually loudly, and they prey on the unaccompanied. Many people believe, somewhat foolishly, that wearing dark sunglasses or reading a book will deter a talker. Sadly, this is not the case, as talkers are immune to such subtle social cues. The unaccompanied commuter's cue must be explicit and unmistakable if they are to avoid the unwanted chat. Simple, yet effective, the donning of an iPod while adopting a vacant expression can stump even the most persistent talker.

More than an MP3 player, TV, or mass storage device, the iPod can be a personal escape tool, a teacher, and even a travel guide. Everything from your choice of iPod to how you engage with the technology can speak volumes about your personality. Some people pour themselves into the device; their iPod mirrors their personality as they customise not only their playlists, but also the look and feel of the device. For others, simplicity rules, with a preference for the classic iPod look.

# Style

The iPod nano, Classic, iPod touch, and the iPhone are all of the same general design, so it falls to the end-user to imbue their personal style upon their iPod of choice. Multi-coloured socks, streamlined leather pouches, blingedout Swarovski crystal-encrusted cases, and customised vinyl skins empower expressions of human creativity, resulting in iPods that reflect their owner's mood, flair, and style.

Ryan Holmes, a final-year design student, said he wanted his iPod to reflect his creative nature and used online skin design company, mytego (www. mytego.com), to create a one-of-a-kind skin (from US\$13 delivered).

"I did it because it's something I carry with me everyday and I wanted it to be an extension of my personality and everything I'm studying," Ryan said.

Off-the-shelf skins come in different colours and limited designs that aim to personalise the iPod. The Tego skin is designed and created by the end-user, incorporating their photos, designs and drawings.

"I created my skin for the same reason I carefully choose the clothes that I wear each day: I wanted my iPod to be an accurate representation of me," Ryan said. Everyday, people choose colours that match their mood and their personal style. Recognising people's inherent need for self-expression, Apple designed the iPod shuffle to be worn. And people wear them. In red, green, blue, purple and silver, people adorn the technology, clipping it to their sleeves, lapels, coin pockets, even their hair.

Its designers say the shuffle speaks volumes about a person's style, and they couldn't be more right. The colour you choose and where you clip your shuffle reveals elements of your personality. Wearing a red shuffle can signify a bold and dynamic character, and by choosing red, the wearer is showing their support for the Global Fund to fight AIDS in Africa, as Apple gives money from the purchase of their red products directly to the Fund.

Music and fashion can define and inspire personal style. According to Kenpo Inc. Vice President Joel Bernstein, technology and fashion are two factors that have the greatest influence on the daily lives of consumers.

Clothing manufacturer, Kenpo Inc. has developed a technology-enabled line of jackets called the Kenpo Jacket for iPod, enabling wearers to pause, skip tracks and adjust volume using an interface on the sleeve.

The Jacket uses smart fabric' touch pad technology, which transforms the sleeve into a five-button electronic control panel, so wearers can keep their iPod in the jacket's inner pocket and still manage their music.

# **Function**

The multi-function iPod is a personal entertainment centre, but is capable of much more than MP3 and movie playback. For the traveller, an iPod can become a tour guide, can be used to learn a language, or even to navigate the London Underground. It can store hundreds of photos and, with the new iPhone, can even be used to call home.

Currently completing her PhD in Photo Media after backpacking across Europe and Southeast Asia, Talhy Stotzer said travelling in remote locations made it hard to access technology and that she used her iPod to store photos while she was away.

"Travelling can be a solitary experience, which is both a good thing and a bad thing," Talhy said. "I found my iPod to be a real comfort at



Porscha Carey with her iPod

# iPod Colour Wheel

#### Red:

Red represents an outgoing, vigorous and impulsive personality. Sometimes aggressive, red people are typically bold and dynamic.

#### Green:

Green represents a frank, down-to-earth personality. Green people are usually refined, modest and patient.

#### Blue:

Blue represents a soft, compassionate and caring personality. Generally conservative, blue people are usually sensitive and self-controlled.

#### **Purple:**

Purple represents a highly individual, fastidious personality. Purple people tend to be unconventional and sensitive, with a strong desire to be unique.

### Silver:

Silver represents a cautious, but hard-working personality. Silver people are efficient and often excel in business.

times because I'd stored photos of my family and friends, which was also great to share with people I met while I was away."

"I think music can really change a mood and I found when I was feeling down it would pick me up. Now that I'm back from my travels, certain music reminds me of my time away," she said.

The iPod's functionality is two-fold for students. In terms of entertainment, it can be an ideal procrastination tool, while its capacity for file storage makes it useful for backing up assignments.

Completing her Masters in Professional Communications, Porscha Carey said she initially bought her iPod nano for its sleek design and storage capacity. She said using her iPod to help her study was an unexpected benefit.

"I download my lectures online, I save them into my iTunes and then upload the audio or the video file to my nano," Porscha said. "The whole process takes less than two minutes. I pop in my ear buds and it feels like I'm in class while on my way to work. More students should use their iPods to listen to lectures, it ingrains the lessons while letting me go about my day."

Whether you use it to tune the world out, to get motivated at the gym, to study on the go, or just to avoid that nuisance talker on the bus, your iPod is without doubt one of the most advanced accessories around. The iPod is designed to be worn and, with customised skins, socks and crystals helping people express themselves, the humble iPod is becoming more unique with each new user who adorns the technology.

# Who are you?

#### Corporate bulldog:

Your iPod is usually located in your shirt pocket or worn on your belt in a stylish leather pouch.

#### Student:

You are young and unpredictable, sometimes wearing your iPod in plain sight, clipped to your t-shirt or jeans, sometimes slipping it into your back pocket.

#### Gym junkie:

Your iPod is usually affixed to your upper arm or your wrist via an iPod Armband, leaving your hands free to pump iron while drinking a protein shake.

#### Paranoid traveller:

You're worried your iPod will get stolen so you keep it safely in your front pocket, hiding the headphones under your shirt.

#### Techno-geek:

You wear your iPod on your sleeve, with a tech-infused 'smart fabric' jacket that interfaces with your iPod.

Rew Task

# Understanding vs learning

We all know each student has his or her own learning style, but figuring out how to cater for a variety of different styles in the same class can be extremely difficult for instructors.

Aiming to take some of the guesswork out of the process, a team of researchers from the University of Southern Queensland, Deakin University and La Trobe University has been utilising SBG's Studiocode video analysis toolbox and plasq's Comic Life presentation tool to improve the understanding of students' learning.

The project - part of a three-year government study on the subject - grew out of a fear that students aren't always understanding the things they're taught, even if they're doing well on tests. So says Professor Bruce Waldrip of USQ's Faculty of Education - who, along with La Trobe's Professor Vaughan Prain and Deakin's Professor Russell Tytler and Dr Peter Hudder, has been conducting the research since mid-year.

"Often teachers just tell students what to learn and make a comment about it," Waldrip explains. "We tell students that sound is a wave, but ask them to describe sound [and they struggle]. We've been working from the idea that we can give students tools to show what they're understanding."

To turn the project into reality, the team has been working with a variety of school-age students in grades four through twelve, primarily in the area immediately around each university. The researchers visit the class in question armed with Macbooks and two video cameras, then break the class into groups and task the students with solving a problem and demonstrating it.

Recording the students as they work through the assignment - which includes audio feeds via remote lapel microphones - lets the teachers later review not only the outcomes of their work, but the decision-making process the students they go through. Studiocode, which only runs on Macs, assists in analysing large amounts of video data using capabilities such as frame-by-frame analysis.

"We use Studiocode not as a recording of what's happening, but to try to pick up these pictorial cues about how kids are sharing their knowledge," says Waldrip. "When you talk about things from a student's perspective, and the students are developing a project and checking it against established scientific knowledge, the kids are remembering much better. They're constantly being challenged with questions like 'what is it that isn't represented?' or 'how do you explain this?'"

While many kids shy away from being examined during learning activities, the students involved with the project have proved more than willing to be wired up and scrutinised during their teamwork. Waldrip says the students in the schools the team has visited have been "engaged, listening, and wanting to be involved. Through this process, you get a much deeper understanding - and long-term retention is much stronger than what you normally get."

Teachers have proved equally enthusiastic about the project: many report that it has breathed new life into their teaching methods by helping them understand just how much of their teaching the students are actually taking with them out of the classroom.

"They start where the kids are, not assuming where the kids are," Waldrip explains. "As they go through the process, they've got to be constantly negotiating where their thoughts are, and adapting them to make them more viable." As well as becoming video stars for a day, students also prepare formal presentations on the topic using Comic Life, which has proved a popular way of diagramming how natural processes work. The application's built-in tools allow diagramming of various contextual frameworks, with arrows and flashy effects adding visual appeal.

Already known to be popular to students, Comic Life has strengthened their involvement with the research project: "It is quite powerful, and the kids had a lot greater ownership," he explains. "They were establishing the conventions and the way they were sharing their knowledge, and there's a lot more ownership from the kids in what they're doing. Combined with Studiocode analysis, and our understanding of how they're learning is just so much greater."

11/

# SHOUTING OUT LOUD

(from left) WASA's Paul Goldman, Julian Argus and Jeff Asselin

Sometimes, the best films are the ones that deal with topics most people won't touch. This proved to be the case for Jeffory Asselin, a media/multimedia producer from Murdoch University's Teaching and Learning Centre, whose short film 'My Shout' recently took out the prize for Best Drama Production at the Western Australia Screen Awards (WASA).

The 15-minute film, which is about a financially struggling farmer who is driven to kill a marshal sent onto his land, "is about men's depression and how they don't deal with it," says Asselin, who collaborated with filmmaker Julian Argus to produce the project completely on their G5 PowerMacs using Final Cut Pro.

Much of the experience needed to make that post-production possible came from Asselin's day job, where he works developing promotional and marketing videos, educational and instructional documentary videos, interactive DVDs and online content.



Among his past projects, Asselin was involved with the production of 'Quick Skills' online learning modules, which were recognised with a Carrick Award for Australian University Learning and Teaching. He was also involved in another award-winning film - 2004's 'Little Man' - which won four WASA nominations and won the Best Actor category that year. That film also won the Australian Cinematography Society Gold Award for WA, and the Australian Cinematography Society National Distinction Award.

An artist by training, Asselin ended up in his dual filmmaker / content producer role after graduating with a Bachelor of Multimedia but finding he was more entranced by his "crazy idea of going into the film business", he laughs. "It has been fortunate that I've been able to apply my skills in both the educational setting and also with an independent filmmaking venture."

Although his string of awards clearly confirms his talent, Asselin is also quick to credit his move from Windows PCs to Macs for helping him develop the post-production chops that have fuelled his success. A "pretty hands-on" approach to it all has saved the team significantly on post-production expenses, and put powerful editing capabilities at their fingertips.

Asselin's experience with Mac filmmaking had a direct impact on his planning at Murdoch, which previously "had become quite reliant" on its Media 100 video editing systems. As part of a broader upgrade, he sought to simplify the studio and replaced its expensive legacy systems with Mac systems. Accoutrements like a Blackmagic Design uncompressed SDI video monitor, and massive LaCie storage arrays, complete the picture.

During production of 'My Shout', the video footage was shot on Super 16 film, then telecined to Digibeta and edited in uncompressed format on the workstation. Final Cut Pro was used for editing and colour grading, providing a responsive and effective film editing suite. "If you were to hire a system like this, you'd be paying \$600 an hour," Asselin says. "We were fortunate we had the Mac setup and could take our time to do what we wanted. I do everything on the Mac - even the script writing."

The section of the se

With the first award under their belt, Asselin and Argus are in the process of shopping the film around to film festivals and distributors - a long and challenging process. Using an iPod Video to store the film, they've been able to show it on the spot to representatives of various media outlets, enabling instant discussions rather than distributing DVDs and waiting for a call back.

In the longer term, the portability of media looms large in both aspects of Asselin's production work. "We've been doing everything from multimedia and online video streaming to Flash learning modules," he explains. "I'm very interested in online delivery systems, and I think they're the way we're going to see things in the future a lot more. There's a future there in educational delivery systems, and I bring all my skills to the education side of things."

# New Apple Tech

It's been a busy year for Apple already, and February has only just finished. But with more than 5 million copies of Leopard sold within months of its release, and a raft of new products coming down the pike, there's more innovation coming out of Cupertino than ever. Here are a few of the latest highlights:



# (Nearly) lighter than Air

It was hotly anticipated before Macworld, and enthusiastically received during the event in mid January. The new Macbook Air takes Apple's hugely popular laptops to a new dimension by stripping out many of the heaviest and most power-hungry components. The result: a lightweight (1.3kg), sleek-looking, incredibly thin (1.9cm thick) laptop with a full-sized 13.3-inch screen and a battery life of up to five hours on a single charge.

Despite its diminutive size, the \$2499 Macbook Air doesn't skimp on features. High-speed AirPort Extreme 802.11n/g/b wireless LAN connecticity is built in, as are an 80GB hard drive, 2GB of RAM, Bluetooth 2.1+EDR, built-in iSight video camera, LED backlighting, a MagSafe power adapter, and a multi-touch TrackPad including support for multitouch features including tap, scroll, pinch, rotate and swipe. An optional 64GB solid-state drive replaces the power-hungry hard drive with a lower consumption, higher-speed memory based storage device that shortens load times considerably. Designed for those wanting the power of a Macbook in a tiny and unobtrusive package that's easy to carry around, the Macbook Air is just the right size for uni students, who spend most of their time in an environment where wireless LAN connectivity is pervasive and it's increasingly important to have computer access anywhere, any time.

Producing the world's thinnest laptop was no easy feat: a custom-built processor from Intel shrank the built-in 1.6 or 1.8GHz Core 2 Duo dual-core processor to a fraction of its normal size, and bulky components such as the DVD-RW drive and Ethernet port have been taken out. The optional USB-connected MacBook Air SuperDrive is available for those that still need optical drive capabilities, although many users won't need it thanks to innovative Apple software that lets the Macbook Air use its built-in wireless LAN connectivity to access the DVD-ROM drive on a Windows or Mac PC as though it were directly connected.





# Logic Studio

If you're into music - really into music - you'll find much to love in Logic Studio, a bundle of audio production and engineering apps that will let you do just about anything with your music that you might want to.

Logic Pro 8, the core application of the group, combines a new single-window interface with time-saving new audio production tools including Quick Swipe Comping and dynamic channel strip creation. Also included are end-to-end surround sound production capabilities, multichannel tracks and busses, and support for True Surround software instruments and effects.

If live performance is your thing, MainStage is your thing. Including screen controls that link software plug-ins to hardware knobs on audio gear, MainStage bridges the gap between live performers and the software tools they rely upon while making their music. Professional templates simplify setup, and a screen designed for onstage use is easy to read at a distance.

Logic Studio is still relevant once the performing is done, with the inclusion of Soundtrack Pro 2 providing a full suite of professional postproduction tools, including fully-featured audio editing and seamless integration with film and video. Finally, there's Studio Instruments, which includes 40 instrument plug-ins that provide a range of synthesisers and samplers. A Delay Designer plug-in controls individual delay taps, while the Space Designer module provides True Surround for multichannel processing.

Complementing the pack are a sound library containing more than 18,000 Apple loops, 1300 EXS instruments, and 5000 sound effects from the five Jam Pack collections and Final Cut Studio 2. Logic Studio also includes production tools like WaveBurner for mastering CDs, Compressor 3 for encoding surround sound, an Apple Loops utility and a new tool called Impulse Response, which analyses the acoustic dynamics of an open performance space.



# You've got the Touch

The iPhone may not have hit Australia yet, but it's possible to get most of its functionality (bar the phone) through the iPod touch, which was launched in September and received a major software update at Macworld in January.







Important enough to merit its own mention in Steve Jobs' keynote speech, the iPod Touch update - available for \$24.99 from the iTunes Store - adds five major features including Mail, Maps, Stocks, Weather and Notes. Mail offers rich HTML email that's compatible with most POP3 and IMAP email services, while Stocks and Weather pull down current information on the go.

Maps implements an innovative location approach to triangulate the user's location on the Google Maps service, using a massive database of known WiFi hotspots. Unfortunately for Australian and New Zealand users, that database is currently focused on US and Canadian customers. But all iPod touch users can still benefit from the updated version's customisable home screen, which can be rearranged and complemented with the content tracking capabilities of the new Web Clips feature.



# Your own time capsule

The Time Machine feature of the new 'Leopard' operating system brings innovative and automatic backup features within the reach of all Mac users. However, in its original incarnation Time Machine was designed for people using an external hard drive as their backup destination; those hoping to back up over a network were left to find another solution.

With the release of the new Time Capsule, however, all that has changed. A combination network attached storage (NAS) server and high-speed 802.11n wireless base station, the Time Capsule provides a single, central storage area accessible by any Mac running Time Machine. Seamless wireless access ensures data can be backed up any time the Macs are within range, while capacities of 500GB (\$429) or 1TB (\$699) provide more than enough room for your Time Machine to move.

Time Capsule not only provides simplified backup, but also makes recovery of lost information easier than ever: a few mouse clicks, and deleted documents can be quickly brought back to life. Three Gigabit Ethernet ports provide hard-wired connections at the highest possible speed, while a USB 2.0 port allows wireless LAN users - up to 50 at a time, all of whom can access networked devices and the Internet as needed to share an attached USB printer.



# Fastest Macs ever

Processors just keep getting faster, and so do the Macs built using them. In early January, Apple launched an updated Mac Pro that uses eight processor cores to deliver up to twice the alreadyblistering performance of the previous model.

Packing a pair of quad-core Intel Xeon processors running at 3.2GHz, the new Mac Pro supports up to 4TB of internal storage and includes both a 1600MHz front-side bus and up to 32GB of 800MHz RAM. There's also the latest ATI Radeon HD 2600 XT graphics with 256MB of RAM, a new PCI Express 2.0 graphics card slot providing twice the bandwidth of previous versions, and support for SATA or SAS drives for ultra high-speed disk performance.

And, of course, there's Leopard. Put it together, and you get one blistering-fast system that will make short work of any video, audio or multimedia production. It's the fastest Mac ever until the next one's launched, that is!



# New Xserve

If your department hasn't yet started implementing Apple Xserves, you've run out of excuses. The launch of the fastest Xserve ever raises the bar for servers from Apple and others alike, with basically the same Intel Xeon 5400 series architecture found in the new Mac Pro providing eight processing cores running at up to 3GHz.

In this model, however, the focus is less on graphics and more on storage and connectivity. There are two PCI Express 2.0 expansion slots, providing more than adequate bandwidth for 4Gbps Fibre Channel and 10Gbps Ethernet connections. Three drive bays support up to 900GB of SAS storage or 3TB of SATA storage, with a hardware RAID option providing RAID 0, 1, and 5 with 256MB of cache and a built-in cache backup battery to further strengthen data integrity.

Wrap it all around an unlimited user license of Leopard Server - which includes a range of collaborative tools and the CalDAV-based iCal Server, among other features - and you've got a scalable, blistering-fast server to support Mac and Windows clients running all kinds of applications.

# THE REAL MEASURE OF A STUDENT

Student assessment is always a tricky art, since some courses incorporate regular assessments and others rely on just one or two major examinations or papers.

One of the issues holding back more regular evaluation is the sheer scale of the task: with hundreds and thousands of students in many university classes, it's difficult for instructors to offer more regular assessments. Even when they do more regular evaluations, it can be difficult to extract meaningful information from them in order to get a sense of how the whole class is going.

Convinced there is a better solution, a team of researchers within the University of Queensland's Faculty of Biological & Chemical Sciences has been working on a way to improve the collection and analysis of academic results stored within a formal learning management system (LMS).

The system, known as LEMS (learning enhancement management system), links in with the university's Blackboard LMS and other applications to bring student results closer to the surface for close examination. "One of the problems we have with monitoring student performance is doing it in real time," explains senior lecturer Dr Alan Cody. "There's always a lag - and, while generally they look at how a student is performing, it is across the organisation. Rather than looking at [performance] in terms of a course, systems look at it from an organisational perspective. This means that while you're monitoring your official exam results, you're only doing it at the end of official exam periods."

To encourage more regular assessment of the university's students, three schools - the School of Biomedical Science, School of Integrated Biology, and School of Molecular and Biological Sciences - have brought LEMS onboard to see if it can't improve the management of their nearly 4000 combined students.

Built using Macs around a Filemaker Pro core database, LEMS runs on a cluster of servers, uses Macromedia Flash modules for presentation, and incorporates interfaces into core university systems such as the iMark student performance management system, IQ assessment management system and student enrolment system. Aiming to correlate these metrics with a range of student information, LEMS is giving lecturers and administrators unprecedented clarity in the examination of student performance.

"What we're trying to do with this system is to marry any piece of information about each student that may be relevant to their performance," Cody explains. "We've developed individual profiles and, since we've got all the information attached to that individual, we've developed both an individual profile and can do class profiles. This lets us put in programs that specifically target students while they're coming to the uni."

By allowing the university to become more proactive about identifying students who are chronically underperforming during their time at uni, LEMS is expected to significantly improve the success of interventionist measures aimed at helping students in need. For example, students from non-English speaking backgrounds may be earmarked for special support before or during examinations to aid comprehension. Or, if a cluster of students from the same secondary school was noted to be doing poorly in a specific university subject, that secondary school might be notified and motivated to revisit its curriculum.

# Performance measure

To facilitate the process of keeping on top of student performance, the system uses a stoplightstyled interface that flags student records with red, amber or green lights depending on how they've been going.

As new assessments come in, these lights change to ensure that administrators are always apprised of student status. Because the indicators are generated using aggregate data, they can also be used to easily develop class-level measures. Since LEMS is tied in with examination software, this means it's possible to pick out anomalies in student performance and match them with particular questions or assessment styles.

For example, a student that does well on a written examination but very poorly on an oral presentation might be flagged for some public speaking support. Or, if a class is all doing worse than average on a particular exam, a warning flag may suggest that exam is too difficult or that the instructor needs to teach that subject a different way.

Integration with the university's Business Objects business intelligence system has provided a powerful range of analysis tools for use within the framework - but its reports are only the beginning. With the LEMS front-end in place, administrators can build completely new views of their data.

"We're saying that we need to manipulate these in a much more flexible manner," says Cody. "You're tying the information at different levels - hierarchical and lateral and horizontal to produce a complete overview of the student and their performance. This is the first time we've been able to see the demographics of our student population, and we're looking at it as a tool that will serve multiple purposes."

In the long term, one of those purposes could be to tie university performance measures to earlier school performance, even as far back as primary school. Working proactively, such measures could help secondary school teachers address potential issues well before students actually arrive at university. The ultimate question is "how do you ultimately connect a primary school kid to a career?" says Cody.

# Phased rollout

Introduced within the past few months, LEMS is doing the rounds at the university, and has already attracted interest from outside the faculty.

Ultimately, the introduction of the technology will follow a four-phased approach. The first phase, which was completed with the introduction of the system, was to get the technology online so staff can start seeing its benefits. The second phase, which the university is currently working through, encourages the development of interventionist strategies based on the information LEMS produces.

Phase 3 will take a more proactive approach towards students, giving them regular updates on their assessments - including comparisons with their peers - and pointing them towards online and offline resources to help them improve their performance. The final phase will see the unification of assessment and performance measurement metrics, creating a feedback loop that will drive the more detailed management of exams and other assessment mechanisms.

In the long term, other metrics - for example, departmental or scholarship funding - may also be introduced to add other dimensions to the analysis LEMS enables. The faculty recently appointed a full-time Manager of Student Experience, whose entire job revolves around using LEMS to identify students in need of complementary or even advanced education.

"We're looking at this as a tool that will service multiple purposes," says Cody. "Because it's outcome based, rather than trying to use our money across the board we'll specifically target certain areas; because we can see performance changing, we'll know whether the money is making a difference. This will all revolutionise the way we can deliver our programs."



# The tangled wer they spin

The ability to identify bias and selective reporting in the media doesn't come naturally; for most students, it's a skill best obtained by hands-on experimentation and analysis.

For University of Wollongong PhD student Natalie Cooper, finding a better way to teach such critical analysis has been a years-long endeavour. Funded by the Australian Research Council (ARC), as well as by Apple and WIN TV, her project began in 2004 but kicked into pilot testing in 2005 after full ARC funding was obtained.

The project's goal was to see whether a more interactive approach could help students develop critical thinking skills when analysing media reports. "My PhD is looking at the processes that students go through in undertaking this program, and the learning outcomes associated with the multiple literacies they achieve," Cooper explains. "The broader project is also looking at processes for the teachers, and their teaching and learning outcomes."

Cooper's project - in which she has been assisted by Faculty of Education senior research assistant Lisa Kosta - came in the form of a ten-week course, run with Year 8 and Year 9 students. The course includes a range of elements including an interactive Web site, regular activities, and other interactive features.



The initial pilot test involved just one class of 30 students, but the longer-term research has seen Cooper and Kosta running a series of courses in which they work with students to complete a series of activities. For example, students are tasked with analysing various different types of reporting about a similar story - a task that has become effortless



with the move of newspapers, television stations and even radio stations onto the Internet.

Students compare and contrast the coverage from various media outlets, discussing the potential reporting bias in the context of each outlet's political and social context. Students are taught about the process by which journalists create their stories, then - as the last activity - asked to compile their own one-minute news story.

This last process involves a range of steps including organisation of interviews, writing scripts, shooting their own footage, and using iBooks - loaned by Cooper and Kosta where schools don't already have their own - to manipulate a variety of professionally shot stock video footage. Students also have access to six digital video cameras, also provided by the researchers.

In a recent exercise, students were given the option of covering a story related to the Rolling Stones, or covering the controversial 'Where the bloody hell are you?' tourism advertisements (all chose the Rolling Stones).

By providing both a teaching context and the chance to make their own news, Cooper says the students have gained a strong grasp of the various issues involved in media analysis. They have proved quite enthusiastic when it comes to sharing their own videos, and have enjoyed comparing what they produce with the coverage that actually aired.

One finding from the research has proved particularly interesting: "Students who tend to struggle with English, have taken the ball and run with this," Cooper says. "They're pleased with what they have produced, and enjoyed it and gone quite well. It's also interesting to see teachers that don't have a lot of knowledge about technology, being taught by students. The kids go ahead and quite happily navigate the Web site; it's been a big step out of the comfort zone for a few teachers involved, but they've done really well. "

The current round of research will continue through the end of this year, but Cooper is hoping to provide a broader range of content, as well as new options for both students and teachers to enhance what they take from the program. Furthermore, improved standardisation of the unit content could eventually see it become a standard module that can be easily integrated by teachers into their curricula.





# Sticking to the script

.



Preparing course materials for more than 200 academic units per term is hardly a small effort, but Kurt Otto, a courseware developer with Southern Cross University's Flexible Learning Development Services (FLDS) business unit, has made the process a whole lot less painful after using AppleScript to coax Adobe InDesign to play along with the unit's workflow.

As the central design and printing resource for SCU lecturers, FLDS manages all kinds of submitted documents, which despite their chronic formatting and content issues must be massaged into standard formats before printing. Each department within SCU sets its own document standards, and it's up to the 15-strong FLDS team to massage the electronic documents it receives into compliant documents ready for printing.

In the past, this process – which in its first steps involved collating around a dozen lecture outlines and materials submitted for each course – was incredibly time-consuming, Kurt explains: "we used to work with dozens and dozens of templates to get it all together. Invariably people make mistakes, and compensating for many of those can be very hard. It all involves a fair amount of work."

To save time, Kurt began exploring ways that the team's InDesign production environment could be linked with its Filemaker based job tracking system, using AppleScript to facilitate many of the finicky changes that the team had to make each time it sat down to produce another set of course materials.

One of the first results was a script that proved extremely useful in ensuring consistency of submitted materials, which were brought into conformance with usage guidelines by looking for common mistakes. For example, "Web site" was changed to "Website", hyphens in references were changed to longer en-dashes, and URLs have to be formatted in a particular way. A previously used script had the search terms hardwired into it, but Kurt's efforts allowed him to extract those terms into a separate XML file that is queried by the AppleScript and can be easily updated as new terms are found.

Another key script sought to tackle an even bigger problem: the broad range of styles used in submitted documents. Because style formats have to follow department-specific guidelines, the AppleScript guides InDesign through the process of working through a submitted document and ensuring that bold or otherwise formatted text is following required styles. It also saves the document using the university's prescriptive, carefully structured filename and directory conventions.

These and other scripts are helping automate what used to be an extremely manually-intensive process, with a well-defined series of templates guiding staff through the process of formatting content and applying it to the appropriate templates. Preparing the templates for a 12-topic study guide used to take a FLDS staff member around an hour, but the unit document builder scripting has reduced that down to around a minute.

"When materials come in in Word, they're all over the place," Kurt says. "[Automating the process with AppleScript] has saved us around 15 weeks of working time altogether. It really cuts down on problems."

Kurt's AppleScript work has proved invaluable in linking the InDesign system with the Filemaker database that tracks the unit's jobs, allowing him to build a workflow process that will eventually expand to include activities such as automatically emailing academics to let them know their documents are finished. Such activities are currently handled manually by staff members, but "could be easily automated", Kurt points out.

With several successes under his belt, Kurt is turning his sights to even more complicated efforts. For example, he's working on an AppleScript that will facilitate the movement of content into the university's Blackboard learning management system.

Another project will allow the production team to send InDesign drafts back to academics for editing, using scripting to ensure image content and placing are preserved even after the document is converted to Microsoft Word format. And he's considering the use of Cocoa to move some of the scripts to work with Word as well as InDesign.

"This all essentially save out staff going through and finding these things themselves, and cuts down time for the quality assurance staff as well," Kurt says. "They just have to get the documents, place them in the appropriate templates, and Bob's your uncle."

Matthook Air

# UPWARDLY MOBILE

By Carrie Osborne, Griffith University

# MAKE YOUR OWN MAPS

Next time you are hosting a party or event and need to give everyone directions, try throwing a custom Google Map into your invitations: your guests won't have any excuses for getting lost on the way.

Google Maps has an easy to use feature that allows you to create personalised maps and share them with your friends. First, you will need a Google account - then head over to the "My Maps" section in Google Maps (maps.google.com. au). Now all you need to do is find the desired location, zoom to the right level and add your own placemarks, directions, photos, videos, overlays, etc. You can enter a start & end address, and it will automatically plot out the most direct route.

If you know a better way, or want to add a couple of stops - you can just click and drag the route to customise it. There is also the option to view your map as a normal map, a satellite photo, or a hybrid of both. Each custom map has its own URL, so once you're done, you can just send the link to your friends and help them get to the party on time.



## **MOBILE PHONE POWER HUNGRY?**

If you feel like you are forever recharging your mobile phone, here are some tips for making the battery last longer.

Try limiting the use of extra features that drain the battery - this includes:

- Leaving the backlight on
- Playing games
- Taking photos (especially using the flash)

Something else to keep in mind: when you are in an area with limited connectivity, your phone uses a lot of juice searching for a network. So it may be best to turn it off if you are going to be out of coverage for a significant length of time. Finally, turning your mobile off while you're sleeping can stretch the battery even further. If you use yours as a wake up alarm, see if it has a feature that allows the alarm to go off when it is switched off.

# FEATURED WEBSITES

If you are itching to find out the name of the song that is stuck in your head at the moment, there are a number of websites that can help you - which will save you the embarrassment of attempting to sing it to the staff at your local music shop.

### IF YOU KNOW THE LYRICS...

This makes things a lot easier, so a simple Google search should be able to reveal what your song is. Otherwise, you can try out one of the many lyrics search sites out there, like www.lyricsdot.com which allows you to search by band, album, song name or words within the song. This website has minimal advertising and a respectable 130000 songs or so in their database. It also includes the option for users to submit their own lyrics, so it continually expanding.

Wheelst

# COOL PRODUCTS

If you're back to uni this year, odds are you're going to have a few USB Flash Drives hanging around to store all your files. Want to stand out from the crowd? Here is a selection of some of the more unique models available:



#### **ZIP-ZIP MEMORY BRICKS**

An Aussie company have released a range of USB flash drives for the young at heart - that look just like Lego bricks. These cute little drives come in five classic colours and can be stacked on top of each other. As an added bonus, the lid can conveniently snap on top of the body while it is plugged into your computer. 1GB models cost \$49; see www.zipzip.net.au.

#### SWISS MEMORY

Swiss Army have a range of multi-tools called SwissMemory. These handy tools combine USB storage with other pocket sized options like a laser, led mini light, ball point pen, screwdriver, MP3 player and - of course - the trademark knives.



#### ATP TOUGHDRIVE

If you tend to put your USB flash drives through a fair bit of abuse, this rugged number is for you. Featuring a robust rubber housing, it is both water resistant and shock absorbent. People have reportedly seen this device survive trips through the washing machine and sitting in a cup of water overnight. In addition, it is made of quality components and transfers data very fast, making it a sensible choice.



#### NOVELTY

For people who like something a bit more out of the ordinary, Dynamism (www.dynamism.com) offers a collection of the latest novelty USB flash drives. Sure to turn heads, items from the range include sushi, fast food, stuffed animals and pieces of wood.

### IF YOU KNOW THE RHYTHM. AND STRUGGLE WITH SINGING...

For those of use who have trouble making it past the amateur rating in SingStar, the website www.songtapper.com may just be your last resort - besides waiting to hear the song on the radio again. To search for a song, you 'tap' it in by pressing the space bar down for each syllable in the song (holding it down for longer notes). This website was developed by students at Simon Fraser University in Vancouver. Users can help develop the system by teaching it new songs adding to the existing collection of over 66000 songs. Using this site is pretty fun, but you may have to try a few times before you get a match.

## IF YOU WANT TO LISTEN TO IT AGAIN...

Once you know the song, you can preview it and purchase your own copy through the iTunes Store.

## IF YOU KNOW THE TUNE, AND CAN SORT-OF SING...

Then the beta website www.midomi.com might be able to help out. You'll need a computer with a microphone, so that you can (attempt to) sing, hum or whistle the tune into the website. It will then search their database (built 100% by users), looking at pitch, tempo, variation, speech content and pauses to try find a match. This is especially handy for classical music and songs with only a few lyrics. This website was started by students at Stanford University and continues to grow as more users contribute their own songs and recordings.

Keyvan Mohajer, CEO of Melodis Corporation, the company that launched midomi.com in January of 2007 says: "In the last 6 months we have collected over 100,000 recordings from users all over the world. The number is increasing rapidly and sometime next year (2008) we estimate to reach over 1 million recordings."

Keep in mind that this website is still in beta mode - so if you don't have the best singing voice, then you may have to resort to the next web site.

## IF YOU KNOW THE SONG, AND YOU WANT TO KNOW THE MEANING...

Once you have finally deciphered the name of the song, and listened to it again - you may want to know just what it means. There are a number of websites that can assist you - for example www.songmeanings.net. Here you can view the lyrics of the song in guestion, and see other people's interpretations of what they think the artist meant when they wrote the song (which leads to heated debates in some cases), and contribute your own thoughts.

### DID YOU KNOW...

The term for songs that get stuck in your head is earworm. There are several theories on why this happens. See http://en.wikipedia.org/wiki/Earworm for more details.



# 

Memory upgrades are the best way to get a performance boost from your computer. Mac OS X loves to use up all the memory you've got, so the more you have, the better! Here are a few often-asked questions and their answers regarding memory upgrades and Macs.

# What exactly is memory?

Memory (also called RAM, an acronym for Random Access Memory) is the working area used for loading, displaying and manipulating applications and data on your computer. Although an application may reside on your hard drive, once it's loaded it is actually running in the main system memory, where it can communicate with the rest of the computer much faster than if it was only running from the hard-drive.

# How much memory do I need?

The more tasks you are conducting on your computer, the more memory you need. Some tasks may need more than others, depending on what is involved. The following is a rough guide to the types of tasks you might carry out on the computer and the amount of memory that would be suitable:

- 1GB for your average web surfer/email jockey.
- 2GB for those who like to use iPhoto/iMovie/ iDVD all at once.
- 4GB for anyone using the pro apps (Final Cut, Aperture, Logic etc).

It comes down to what you can afford and justify. If you can justify 8GB and can afford it, then damn them all and buy it, you'll love it. But if you're strapped for cash 1GB will be enough to get you by.

# How much faster will my computer be after adding more memory?

As handy as more memory is in a computer, there is a limit as to how useful it gets. If all you do is email, web browsing, word processing, etc, then having 4GB of RAM is a bit of a waste. Sure, if you decide to open up Final Cut Pro and edit some HD video, you'll be happy you put so much in there. However, during daily use, it will be under utilised - and speed wise, will feel exactly the same as if you had 1GB of memory.

Speed benefits will only appear once you've hit the limit of your memory, and then upgrade to give the computer more room to breathe. If your computer is typically using up 700MB of RAM and you have 2GB of RAM, upgrading to 4GB isn't going to make much of a difference. If you're often using 700MB of RAM and you have 1GB of RAM, upgrading to 2GB will see a speed benefit, particularly when launching a few more programs, or working on larger documents than usual.

# What type of memory do I need? Do I need special "Mac" memory?

First of all, there's no such thing as specific Apple memory. Apple computers use industry standard memory that is available from any computer store. However, there are many types of RAM, and the memory you need for your computer depends on the type of computer you have.

There have been many different types of memory for Apple's various computers over the years, and detailing them all is beyond the scope of this article. However, if you need to find out what RAM your computer is using, check the System Profiler tool by: opening the Apple menu, choosing About This Mac, clicking on More Info, then selecting the Memory option under Hardware. The information in 'Type of RAM slots' will help you get the right kind of RAM.

An idea that Macs require Apple Certified Memory is also commonly bandied about, but this statement is false. Apple does not go around certifying memory, or testing it in their lab. What Apple does do is produce a set of guidelines as to what sort of memory is needed to work in a particular machine. Any memory that fits within those guidelines will work in the Mac.

# Can I install the memory myself, or does an Apple technician need to do it?

Yep! On virtually every Apple computer, the process of installing memory is termed as "user accessible". Doing it yourself means that it will not void your warranty.

If you've ever opened up a computer before, installing memory into a Mac is pretty easy. If you've never done it before, memory is the perfect thing to try first. Be sure to follow the instructions that come with your Mac (the paper manual that came with it - do you remember where you put that?) and it should be a smooth ride. If you aren't comfortable with doing that, an Apple reseller can pop in the RAM for you for a small charge (normally \$30-\$50, but maybe free if you're a good customer for them).

If you have any further questions, visit MacTalk (www.mactalk.com.au), an Australian, online web forum where you can field your question with thousands of other Australian Mac users.



# **Academic Ramblings:** Coming to terms with Generation Y

### **By Mark MacMahon**

My generation has to a large extent defined who I am. I did not live through a war but had the constant fear of nuclear apocalypse. I grew up thinking the first blistering skin of summer was the start of a 'healthy tan'. While my opinions may have evolved over the years, my core education comes from the era of flares, Ford Cortinas, and the colour burnt orange.

We as academics are now struggling this current generation of students, whatever you want to call them. Generation Y, the Nintendo Generation, the Net Generation, the Millennial Generation... the labels are as numerous as the definitions.

We do know that these students are characterised by an intolerance for delay, social orientation, tendency to multitask and an information connectedness that was simply lacking in previous generations.

These characteristics are hardly surprising. Who really needs to visit a library now that we have permanent access to the massive metalibrary that is the Internet? Now we all have mobile phones and PDAs we're constantly sailing the sea of data that makes up the modern world. Is this a good thing?

Your own view may well come down to the side of the digital divide to which your generation belongs. In many ways I've jumped on board the bandwagon - not quite a digital native, but more than an immigrant. I drink the local beer and can speak the lingo. I love my iPod and the ease of downloading my favourite tracks from iTunes. I like the convenience and impersonality of e-mail. But there is still something of the generational cynic in me. I float on the margins of Generation Y, but like the sleazy uncle at an 18th birthday party; I ultimately don't belong. I h8 txt spk, refuse to watch Big Brother and have fewer friends on Facebook than a colleague's six month old baby.

I sometimes fear for my own seven-year-old son. He has never climbed a tree and can barely hold a pen. He can however snowboard, drive, and do somersaults as he jumps on mushrooms - at least on the Nintendo. It is scary though, to think that this child is being reared by a cartoon plumber. Will he one day turn out like Corey Worthington?

You might remember Corey - the spotty sixteen year-old who started a riot when he posted a party invitation at his folk's place on Myspace. You may even be one of the 615,000 visitors who have vented their generational angst at the Slap Corey website.

There is a sweet irony, though, in seeing the product of years of exploitative current affairs and reality TV turn the tables on his progenitors. What does he have to say to others planning the same thing? Hire him to do it. Yes, he took a long hard look at himself in the mirror and he liked what he saw.

Even if we don't share those feelings, who can help but enjoy seeing the self-righteous journalists devoured by a monster of their own making? More Generation Z than Y, Corey is both the poster boy and salutary lesson of the digital age.

Not everyone is like Corey, though. While we create these labels, many of this generation choose not to wear them. Cultural, social and

economic constraints disenfranchise many from the digital world. Others simply choose not to be defined by their age or upbringing.

Some can embrace the creative and communicative opportunities that the 21st century delivers but don't feel the narcissistic need to blog about it. Others, like Diablo Cody, have managed to use blogging as a stepping stone to a successful career. She may be just a couple of years too old to be truly Gen Y, but her script for Juno arguably brought more insight into contemporary youth than the furore around her Australian counterpart.

I'll have Diablo Cody in my class any day. I'm also aware that if his career in hospitality doesn't pan out, some Victorian university may expect to see Corey in a couple of years. We already have a steady stream of students with similar attitudes, if not taste in sunglasses, filtering through the system.

These people are getting jobs. Already employers are hailing the adaptability of Generation Y and their entrepreneurial spirit, while bemoaning their greed and impatience. Some of them are even starting to breed.

I'm not so much pushing 40 as clinging to my 30s for dear life. As I slip from young gun to being part of the establishment, I know that things were not necessarily better in the olden days. I also know how any kind of tag can be dangerously reductive and fail to capture the infinite variety and vivid colour that characterises this generation.

At some point Generation Y will become the establishment and I'll be out of a job. Maybe when that happens I'll take up blogging full time.

Does anyone want to buy a movie script?



# Create World 2007

CreateWorld 2007 kicked off at Griffith University's Southbank campus with pre-conference drinks and an enthralling performance by Topology, one of Australia's leading new music ensembles.

Building upon last year's success, the inclusion of live performance was considered an essential component for practitioners working in digital arts. Later on during the conference, the duo of Andrew Sorensen and Andrew Brown of aa-cell would give a live coding/music performance in what must be one of the most adroit displays of right-brain, left-brain dexterity available anywhere.

A varied and interesting conference schedule included keynote speakers live from the US. Prof Bill Duckworth, Bucknell University USA, Ms Nora Farrell, Virtual Instruments USA and Paul Davidson of the Griffith film school gave an engaging presentation on iOrpheus - the iPod orchestra project – to Sue Baker from the Victorian college of art looking at schools as a new cultural economy in the 21st century; topped off by the ever engaging Stephen Atherton looking at Apple's role in the creative environment.

And there were plenty more presentations to chose from; creating documentaries by Sue Kerrigan of Newcastle University to low cost creative solutions for radio and television broadcasting by Peter Holland and Andrew Dunbar - to case studies in creativity at Coventry Uni in the UK by Mark McMahon to Jason Nelson's net art and Kurt Otto's clever time saving solutions using

AppleScript (read more about this on page 15) Philip Norton's Abelton Live, Luke Toops live video for events and installations and many more which covered the whole spectrum of digital arts.

The two pre-conference workshops, run on the Sunday, received the highest acclaim. You could chose to find out the latest in Logic Studio with Michael Allen or Final Cut Studio 2 with Stuart Harris, both highly authoritative and engaging presenters, and, by all accounts were recognised as the best workshops which many of the delegates had ever attended.

With a general recognition of the wave of social networking lending itself to the creative processes - YouTube is a good example of this where, everyday, thousands of creative outpourings find an audience without the obstacles of agents, bureaucracy or politics – it seems that the grass roots creative landscape is exploding, fuelled by a mixture of unfettered imagination and ubiquitous technology – and limited by nothing other than imagination. As creativity becomes mainstream rather than sidestream, it bodes well for universities with creative offerings where 'creatives' are increasingly seen as essential contributor of every facet of society and business



and not just fringe dwellers. It seems that, for students entering into the workforce, that at last imagination and intellect are seen as equal partners in world which appears more and more to require alternative solutions rather than orthodox ones.

The conference was run a week earlier this year and there was the inevitable clash of end of year shows and exhibitions, which reflected slightly in the numbers of attendees. CreateWorld2008 will be re-established in the early December this year as a fixed annual event. Like the inaugural conference in 2006, it was an excellent opportunity to network and share ideas in a way which as you can see from the photos here, obviously afforded a first rate opportunity for the meeting of creative minds in a venue well used to the beat of the creative pulse.







# CrossWORD Competition



SHUFFLE

#### Across

- Filemaker's diminutive new release (p2)
- 3 The iPod orchestra project (p20)
- 5 U of Q analysis system (p12)
- 7 AppleScripting brought this out of its shell (p15)
- 9 Most popular content for Cooper's students (p14)
- 14 One of Waldrip's peers (p8)
- 15 Where 'My Shout' shone (p9)
- 16 Apple's all-in-one NAS (p11)
- 19 Personalised Google maps here (p16)
- 22 Logic Studio has more than 18,000 of these (p10)
- 23 Brand of SDI video monitor (p9)
- 25 Colour of fastidious people (p7)
- 26 Another generational name (p19)

#### Down

- 2 iPods effective protection from this (p6)
- 4 Tool for tracking teaching (p8)
- 6 When you know the beat but not the words (p17)
- 8 Number of cores in latest Mac Pro (p11)
- 10 Tool set supporting Pixelmator (p2)
- 11 Brand of RAM in the picture (p18)
- 12 Asselin's 2004 award winner (p9)
- 13 Mixing sushi and USB (p17)
- 17 Mind mapping tool (p2)
- 18 Lightest drive for lightest laptop (p10)
- 20 Sorensen and Brown's band name (p20)
- 21 iCal Server based on this (p11)
- 24 Personalise your iPod here (p6)

For your chance to win an iPod Shuffle, complete the above crossword (you'll find the answers throughout the articles) and take the letters from the blue boxes then re-arrange them to form a word. Send this to: crossword@auc.edu.au Competition closes at 5pm on Friday 30th May 2008.

# Congratulations

Congratulations to Mark Schier of Swinburne University of Technology for winning an iPod shuffle by correctly completing the crossword to reveal the answer:

CONFERENCE

140

An iPod is on its way.



# Students, buy a Mac and an iPod nano can be yours.\*

One more reason to avoid the real world.

Buy a Mac and an iPod and receive the price of a 4GB iPod nano after postal rebate.<sup>\*</sup> And save on Apple products every day with your education discount. Visit your Apple Authorised Campus Reseller or www.apple.com.au/education/offer to learn more.



\*Offer is for qualified Apple Education Individual end-user purchasers only. Rebate is for \$199 via postal rebate when purchasing a qualifying Mac (excludes Mac mini and MacBook Air models) and an iPod (excludes iPod shuffle) from a participating Apple Authorised Campus Reseller or the Apple Store for Education between 23 January and 18 April 2008. Additional terms apply. See Official Offer Coupon or visit www.apple.com.au/education/offer for full details. © 2008 Apple Pty Ltd. All rights reserved. Apple, the Apple logo, Mac, MacBook and iPod are trademarks of Apple Inc., registered in the U.S. and other countries.