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Wheels for the

**Rough Guide to
MacWorld
2007**



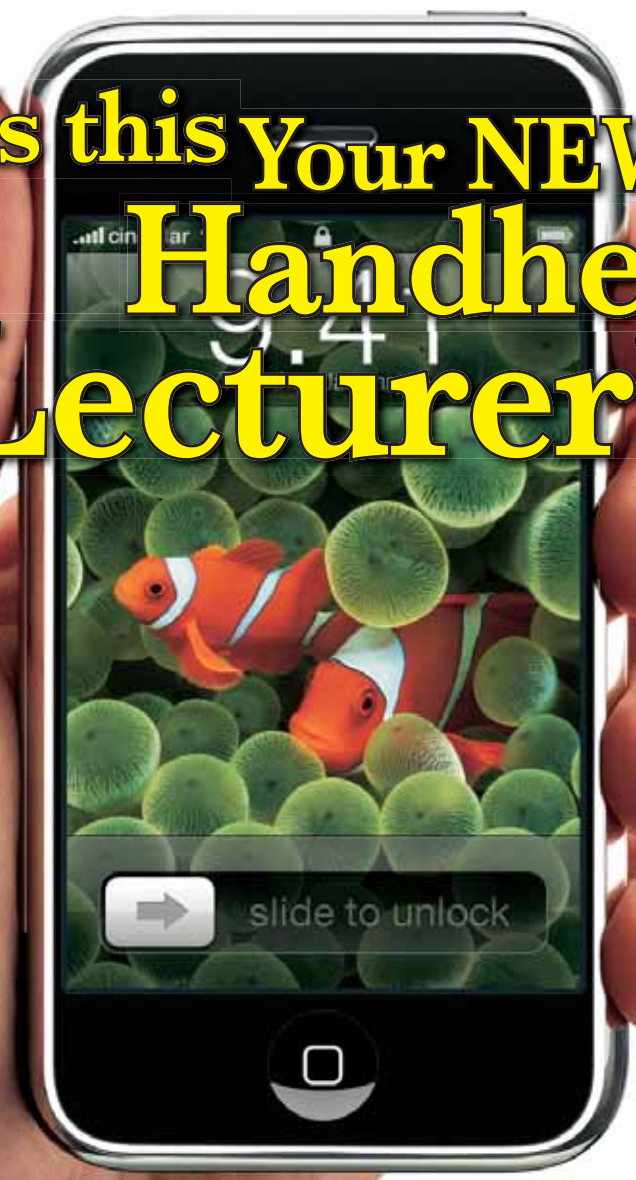
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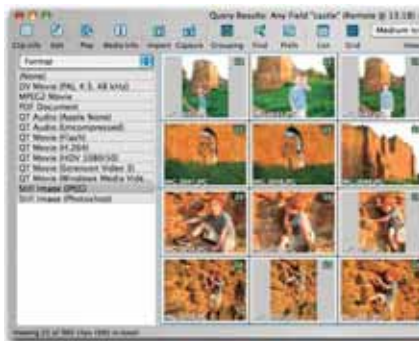
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A magazine for academic staff, students and IT professionals

AUTUMN
Volume 17
Number 1, 2007



Cool cat for hot video

Drowning in video files? The latest release of Square Box Systems' CatDV, version 5.1, uses automatic scene detection to create an index of your videos while they're transferred to your computer. The Verbatim Logger feature records and timecodes subtitles, notes or other comments you type while the video plays. CatDV can also export video for iPods or QuickTime codecs, do batch conversion, manage images and other media files, create Web libraries, and includes a diagnostic mode for analysing broken video files.

CatDV costs \$US79 and can be purchased online at www.squarebox.co.uk/catdv.



Man and the mask

Getting Photoshop image masks right can be painstaking and frustrating work. Cue Vertus' Fluid Mask tool, which incorporates a range of features to simplify the task of cutting out objects from your digital images. Identify the edges to be cut, or let the Edge Overlay view automatically analyse tonal and colour composition to identify key objects in your image. For detail work, the Region Editor lets you mask and unmask parts of a selected area with extreme granularity, while previews let you see the results before you commit.

Fluid Mask costs \$US199 from www.vertustech.com.



Video's in the air

Whether you're going for that Star Trek TNG look or just need a way to watch video while your hands are otherwise occupied, Icuiti's iWear is worth a look. Featuring a slimline sunglasses-like design that the company calls 'digital video eyewear', the device links a pair of pint-sized 640x480 LCD panels that supports up to 1024x768 mode from a computer. Images look like they're floating in the air approximately 2m from your eyes, and 3D stereoscopic capabilities are possible using 60Hz field sequential mode. Video sources include composite and VGA (standard) and iPod and S-VHS options.

For more information, see www.icuiti.com.



The Bryce is right

DAZ Bryce long ago proved its mettle as an extremely capable 3D modelling and animation package for those developing high-resolution landscapes and immersive environments. The new version 6 adds features like real-world lighting using High Dynamic Range Images via the new Image Based Lighting menu; importing of DAZ 3D figures into Bryce 6; image based brushes for editing custom terrains; and mesh export of Bryce Booleans to more than a dozen third-party file formats.

Bryce 6 costs \$US99.95 or \$US39.95 for an upgrade from v5 to v5.5. See www.daz3d.com



Your book, their press

If you're keen to publish the Great Australian Coffee Table Book but can't get publishers to return your calls, Blurb's BookSmart can help. Import pictures and text, and use a healthy assortment of templates to collect your thoughts - then send it to Blurb and they'll ship you a softcover or hardcover book published using 80# semi-matte paper, four-colour printing and a professional binding. Once the company's international expansion plans are firmed up, you'll also be able to sell your books online.

BookSmart (currently in beta) is available for Mac and Windows systems from www.blurb.com. Printed books start at \$US18.95 for softcover and \$US29.95 for hardcover (including dust jacket), plus shipping.



Wash your audio out with soap

CDs have been around long enough that you may very well not have even a single cassette or vinyl LP sitting around. Nonetheless, there is much to love in bias SoundSoap 2, which has expanded from its easy-digitising roots to become an all-in-one tool for dealing with noise in any kind of audio recording. That includes air conditioner buzzing, the rumble of passing trains, the 50Hz hum of overhead lights, the fan on your computer, and other annoyances. Learn noise with one click, then preview the noise and scrub it out of your audio with high granularity that makes it suitable for all manner of audio work.

SoundSoap 2 costs \$US129 or \$US59 for an upgrade from v1. A 5-pack educational bundle costs \$US399. See www.bias-inc.com/products/soundsoap

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EDITORIAL



Welcome to the first edition of **Wheels for the Mind** for 2007.

I have been hearing the word 'renaissance' a lot over the past three months.

As you know, it means 'rebirth' or, perhaps more aptly, a 're-awakening'.

The inaugural CreateWorld 2006 conference hosted by Griffith University was a good example, as creative practitioners wake to the new challenges and possibilities of producing contemporary art in newly constructed cyber-spaces using blended technologies.

MacWorld 2007 in San Francisco was also buzzing with innovation as the announcement of the new iPhone and AppleTV were greeted with excitement by an astonished crowd. Several attending AUC sponsored delegates were given the opportunity to attend workshops and explore a full range of technologies that will touch education in one way or another.

Many are predicting that Apple's new iPhone will transform the mobile communications market in the same way the iPod transformed the music markets. Inside this edition, you'll read Carrie Osborne's 'Rough Guide to MacWorld' which tells of her experience from a first-time delegate's point of view.

Something else new is the 'university round-up' section. In every issue, we will encourage AUC representatives to give a snapshot of what their particular university is up to. Watch this section grow in future editions of **Wheels for the Mind**.

With articles as diverse as new developments in brain scanning at the University of Newcastle and implementing Entourage for Mac users, to experiments with maximising the effectiveness of podcasting at the University of Southern Queensland, you're sure to find something that inspires you to keep those articles coming all through the year.

Of course, with all this change and rebirth it's appropriate that **Wheels for the Mind** explore new ways in which it can reach new audiences in a more dynamic way using Web 2.0 features such as podcasting, RSS feeds, Wikis and the like. Please do not hesitate to contact me and be part of the re-awakening, which I am sure will be the hallmark feature of 2007.

Stephen Johnston
s.johnston@ecu.edu.au

AUC Update: University Round Up

MacWorld thumbs up

By John O'Reilly,
James Cook University

An AUC scholarship to MacWorld in San Francisco in January was an amazing way to begin the new year. Needless to say, I was thrilled at such a great opportunity. At MacWorld, I learned about the various new tools and utilities in MAC OS X Leopard, and saw demonstrations of cool third party applications to automate installs and push images to the Macs and ARD 3. These applications will make my workload much easier to handle.

After the MacWorld information sessions, I feel more confident in my knowledge of OS X 4 server. Enough to implement some systems from calendar services, network homes for staff, also portable users, and to streamline our faculty IT Web structure.

We can make a user's desktop experience trouble-free, constructive and enjoyable, making IT support easier and allowing us to focus on improvements rather than reacting to problems. For example, we could show staff in creative arts the different ways they can use our equipment to produce multimedia productions for presentations (photography), DVD or the WWW.

The appeal of these productions may attract some students who want to expand their creative flair to new levels. I know other IT staff members are looking for better ways to implement their OSX platform and integrate or run Windows applications, and I believe OS X Leopard will provide many tools to streamline and simplify the job.

Writing scripts, and using script 'automator' to add changes to our hardware or software environment for multiple users at one time, is wonderful and surprisingly easy. Plus there is the added benefit of the collective pool of knowledge presenters are willing to share.

I met some great people at MacWorld and had fun learning as much as possible at the information sessions. I am now better prepared for 2007 and getting some Mac learning in will be a big priority. I would like to thank the AUC for making it possible for me to attend MacWorld, and Apple for helping the AUC assist universities around Australia. I talk to many staff at JCU who use Macs and they are very positive about AUC's provision of essential learning for staff.

QuizPod & BlogCaster

By Daniel F. Saffioti,
University of Wollongong

The University of Wollongong has actively been promoting AUC programs on campus and has been using the Macintosh in a number of exciting ways. We recently sent an individual to MacWorld and have allocated a number of Leopard Tech Talk Scholarships mainly to students which looks promising.

In other news, our staff are getting very involved in AUC programs. Owen Mckerrow from the Faculty of Education is working to deliver a WebObjects training course to be run later in the year. This was to be run last year but due to lack of numbers it was postponed. I encourage anyone with an interest to attend. This builds on our past contributions mainly to the developer stream of programs within the AUC.

On campus a number of things are happening. Information Technology Services (ITS) is currently developing an SOE for Mac OS X machines on campus. This is highly dependant on a centralised directory infrastructure.

Toward the end of last year a number of final year computer science students actively developed software for the Macintosh and iPod platforms. The two main products developed include QuizPod and BlogCaster Studio. Quizpod is the result of an AUDF grant that allows quizzes to be developed and executed on iPods. BlogCaster Studio is an integrated tool creating podcasts. Further information can be obtained from:

<http://www.sitacs.uow.edu.au/tradeshaw/>

QuizPod was released and available for download on www.apple.com early in 2007.

The University plans to runs its Enrichment program, which again is highly dependant on the Macintosh platform. The program aims to encourage high school students to use computers. It teaches them about programming, design, composition and various other things mainly using Apple tools. Information can be found at:

http://www.informatics.uow.edu.au/students/prospective/enrichment_program/index06.shtml

There are a number of exciting things happening on campus. This is only the tip of the iceberg!

New roles for Macs

By Ray Smythe,
University of Southern Queensland

The last six months at USQ have seen a renewed interest in Apple products due to not only the switch to Intel processors, but also the advancing nature of MacOS X, the iLife suite of applications, and increasing use of Final Cut Pro, ProTools, and Sibelius in courses.

Division of ICT Services staff have been upgrading servers to MacOS X 10.4 and preparing Mac Pros for a new Bachelor of Applied Media and Music lab commencing in semester 1 at the Springfield campus. The Toowoomba campus Journalism lab has been upgraded to Intel iMacs after their ability to run other operating systems was identified as being a more efficient use of lab equipment.

A number of staff have recently taken advantage of the AUC scholarships. Kate Foy, Janice Jones, and David Cleaver attended CreateWorld 2006 at Griffith University's South Bank Campus in Brisbane. All were impressed with the sessions and are looking forward to attending similar AUC events in the future. Chris de Byl, a System Administrator with the Division of ICT Services, attended MacWorld 2007 in San Francisco and returned with plenty of information about new products from Apple and other vendors.

Broadcasting lectures

By Anne Zanotti,
Flinders University

The major use of Macs at Flinders is in the delivery of recorded lectures. Throughout 2006 Flinders delivered Live Broadcasting, Video-On-Demand, M4V, podcasting and a limited number of 3G files for over 23 topics within the Health Sciences and Science and Engineering faculties, using Apple's LiveBroadcaster, MPEG4 and XServer hardware.

Increased demand and popularity from academics and student to these services has meant a change to the in-house developed Web based console. The team - Scott Chandler, Rob Englander, Dave Barnett and James Caller, managed and directed by Mr Kevin Knox, is balancing quality and delivery methodologies for 2007 to meet this demand.

The services this year will incorporate capturing, compression and delivery using current staff, semi-automatic and fully automatic methodologies borrowing from the TV and security industries.

Macs (and lectures) everywhere

By Mark Jefferys,
University of Newcastle

After a year of significant change, the University of Newcastle is looking forward to building on the solid infrastructure foundation it laid down in 2006.

After a successful trial of Lectopia, all lecture venues will now be fitted to allow online delivery of lecture content via podcasting. With this year's intake of tech savvy and iPod armed students not too far from the doorstep, podcasting will be an integral part of teaching and research.

At the desktop level, work is continuing to incorporate multi-boot Intel based iMacs into our Managed Operating Environment. Early testing of our next MOE images using Leopard is also under way and, with the onset of Universal applications from vendors like Adobe, we are looking forward to unleashing the real power of the new Macs.

For each of our different user communities (technical, creative, academic and developer) we'll continue to gain value from the AUC training, especially with the new gatherings of like-minded Macintosh users.

New homes for Macs

By Tony Gray,
University of Tasmania

The number of Macintosh systems on campus at UTas seems to increase slowly over time, and nowhere is this more evident than in the student community.

In my Graphics & Animation unit (advanced programming using OpenGL), there were more students bringing Mac laptops to lectures than PC laptops. The switch to Intel hardware, and the possibilities opened up by BootCamp and virtualisation solutions from Parallels and VMWare make the Macintosh a very attractive proposition indeed.

The strong UNIX foundation and solid user interface of Mac OS X make the Macintosh an attractive proposition to today's student, and their familiarity with the iPod makes them more aware of, and more prepared to use, the Macintosh than students of five years ago.

The Schools of Computing and Architecture took delivery of their first Intel Macintosh systems for use in student labs over the 2006/2007 break. We're looking forward to the challenges this will create in terms of deployment and day to day administration, and in the longer term to increased performance as more applications go Intel-native. The release of Leopard some time in 2007 will also bring with it new challenges and opportunities. This is certainly a great time to be using Apple technology in the tertiary education sector.



*New Learning Common, CSU Bathurst.
Opened Feb 2007.*



*Ergonomic, comfortable chairs and
work areas encourage collaboration.*

Learning, everywhere

By Brian Roberson,
Charles Sturt University

Last year was a year of consolidation and rationalisation at CSU. Strategies to increase usage of personal laptops on campus, as well as the increased saturation of wireless access points, has ensured students are more able to study anytime, anywhere.

The introduction of our first learning common on the Bathurst campus will facilitate better student interaction, an increase in workgroup collaboration, a more flexible mode of study and a relaxed atmosphere, enhancing the overall student experience. Further learning commons are on the drawing board, with Thurgoona and Wagga expecting to be online by late 2008.

AUC Training programs have continued to be well received and we look forward to participating in many more this year. As well as the technical training offered, many more developers are coming on board and enquiry is high with respect to courses and events scheduled for 2007.

Throughout 2006, CSU has been trialling the use of podcasts as a further way for students to access course specific material. Pilot programs using Apple iPods have proved successful opening the way for further expansion during 2007. This promises to be an exciting avenue of growth moving forward.

*Did you know that you can borrow
CLASSROOM IN A BOX from
the AUC at any time. Logon to
www.auc.edu.au to find out more details.*

Taking to the (Web) airwaves

By Peter Stagg,
Monash University

Podcasting appears to have been the Apple buzz-word at Monash this year, with a lot of use of podcasting and related Apple technology - and the big mover and shaker has been Philip Norton from Radio Monash (www.radiomonash.net), the university's fledgling Internet radio and podcasting service.

Radio Monash's "podcast approach is ... fairly unique among universities," Norton tells us, "in that we are not simply doing lectures online, but creating content based podcasts that highlight the creative output of the university in both research and artistic fields. In 2007, we are planning to work with a number of departments to create regular enhanced podcasts, and will be pushing for podcast kits for each faculty."

Close work with the Journalism faculty has seen students all producing content for Radio Monash as part of their final assessment. The team is also starting a Radio Monash internship program where successful candidates will receive financial and hardware support to make podcasts for their faculty or department.

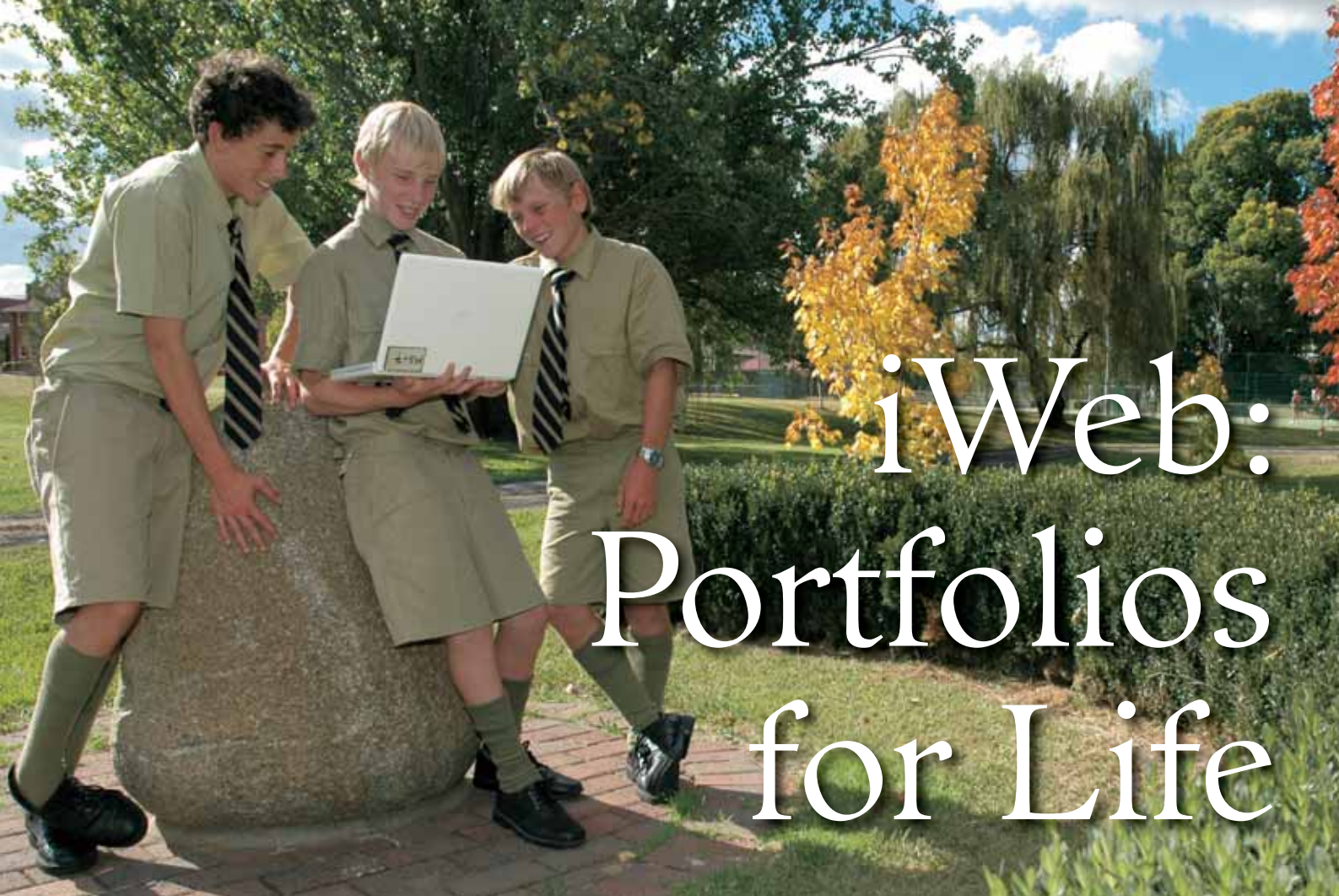
Chris Barnes, Multimedia Systems Coordinator, from another significant corner of Monash's empire, is equally enthusiastic about the podcasting. An upcoming project within the Victorian College of Pharmacy (www.vcp.monash.edu.au) will implement Lectopia, an automated lecture capture system that enables streaming and podcasting of lectures, as part of the Monash e-learning strategy. "This will give our students the ability to revise their course material at a time that is convenient for them," Barnes explains. The project will make Monash the 15th university to install Lectopia.

Dual-boot increasing Mac numbers

By Luke Haber,
Southern Cross University

SCU is expanding rapidly at our Tweed Heads Gold Coast campus, despite a lean year with budget restrictions in 2006. Overall, there was an increase in the number of Macs because the Intel CPU and Parallels/Boot Camp are giving users Windows functionality as well. Many IT staff are looking forward to AUC funded training and conferences for 2007, as well as to the release of Mac OS X Leopard.

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



iWeb: Portfolios for Life

They may still be in high school, but the work of students at NSW's The Armidale School will stay with them throughout their university years. David Braue explains.

A casual iWeb experiment with a group of Year 9 students looks set to kick off a student archiving project that will eventually see incoming university students leave school with comprehensive portfolios of their middle and senior school work.

Around 60 Year 9 students at The Armidale School (TAS), who last year spent a week doing an ecological survey on the NSW south coast, took part in an experiment to document their trip using the new iWeb application.

During their stay, students were broken up into groups, then tasked with documenting their survey using iWeb running on Apple iBooks that were wirelessly connected to a local network - which was in turn mirrored to a permanent server back at TAS. Students were expected to submit new work every day, and teachers back at the school assessed their work by perusing the online portfolios.

The project turned out to be a great success, says director of information technology Martin Levins. "We had experimented before with things like Macromedia Dreamweaver, but it was just too hard," he says. "Using iWeb, the kids published their sites back onto the server. It concerned me initially because they used a lot of hi-resolution

photos and movies, but it gave me great heart because it just worked really, really well."

Success with this trial project led Levins, an Apple Distinguished Educator, to work with other teachers at the Apple Distinguished School to expand the program. Year 7 students were given the opportunity to build ongoing electronic portfolios, into which all of their schoolwork would be submitted over the course of the year. This includes informal content such as blogs, as well as more formal assessments, presentations and other assignments.

All content is restricted to the TAS intranet, available only to students and teachers who visit their students' portfolios to assess new work when it's due. Further expansion of the program could eventually see students publishing content online as well, but for now Levins says the team of educators is focused on establishing the ground rules.

"We want to build the culture that this portfolio is a representation of the students' time at the school," he says. "What we want is to develop a professionalism that will showcase their work, leaving their presence on MySpace and the like to reflect their social networking. We're reminding them that this is for their schoolwork, and that they have to be very cautious with these sorts of things."

With students this year working in a one-for-one laptop based learning environment, the portfolios are a natural complement to the school's push to

enable students for digitally supported learning. This year, the program will expand across the school, with students encouraged but not required to adopt the iWeb-based system to collate and present their work.

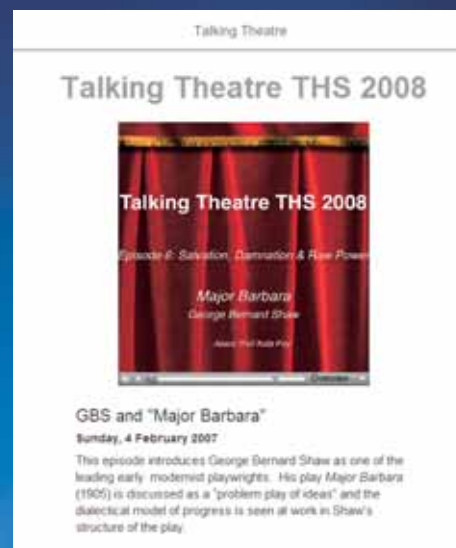
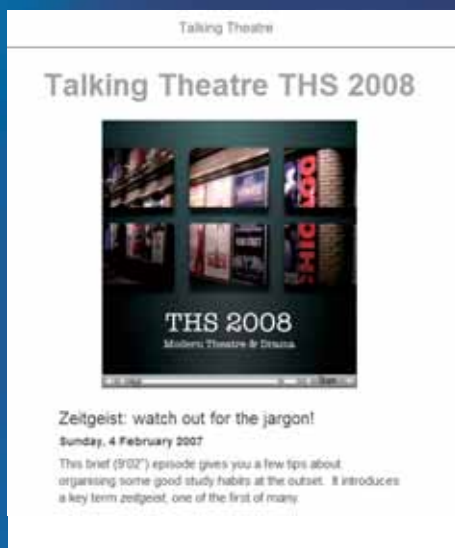
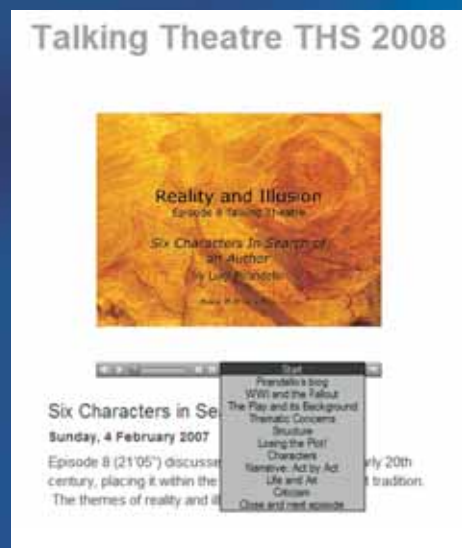
Eventually, Levins expects that departing students will be given DVDs of their iWeb portfolios, which will contain all of the work they completed during their time at TAS. That will make them both valuable souvenirs, and useful transition tools as students make the move to university.

"iWeb enables kids to publish information easily, and they can reflect on their own learning," he says. "In the past they could do that, but they had to put the content somewhere, which was awkward because the only tools available were awkward. These portfolios become the primary point of contact for teachers and parents, and will be representative of them and their digital lives as they continue with their academic careers."



USQ drama queen revelling in new role as podcaster

By David Braue



Kate Foy

The novelty and inherent appeal of podcasting lured Kate Foy to the technology some time ago. After a year of actively recording multimedia lectures for students in four classes,

however, she has found that it can be harder than expected to get students to embrace them.

For a demographic that considers iPods to be essential everyday accessories, that's quite a surprise; clearly, learning and entertainment are still yet to converge in many students' minds. This experience highlights the need to take a slow and regularly revisited approach to introducing podcasting within the university setting.

Foy - an associate professor and deputy dean of the Faculty of Arts at the University of Southern Queensland in Toowoomba - is no stranger to the iPod, having used them extensively to assist in dialect coaching for her drama students for several years. Her other experiments have included use of an iPod and iPod HiFi system to quickly set up the sound system during performances at local high schools, and giving actors iPods to let them control sound effects and soundtracks during their performances.

The biggest ongoing project for Foy, however, has been the introduction of podcasting into her lectures - and finding the right way to disseminate them to students with maximum effect.

Using GarageBand to process sound files recorded on her trusty Olympus DM-20 digital recorder, Foy tied in Keynote slides to produce a series of lectures for four courses: Australian Theatre and Drama, Modern Theatre and Drama, and two introductory level theatre history courses. In each episode, Foy discusses a specific play, theory or era of the evolution of drama.

"I'm a big supporter of the human voice's power," she writes in her blog. "When used well, it can reach out to the listener to personalise and provide focus on content."

Although many students warmed to the content, a surprising number didn't know how to use podcasts or simply failed to warm to the whole idea - preferring to take what Foy calls "messy lecture notes" than to hand their learning destinies over to their iPods.

"For all the students I see plugged in to the ubiquitous earbuds, many were surprisingly conservative when it came to getting their heads and study habits around replacing the live lecture experience with a virtual one," she writes.

Interestingly, the podcasts have proved particularly popular with external students, many of whom are part-time students juggling work, parenting and other commitments. For such students, the ability to get lectures in a clear, portable format is a lifesaver. For Foy, the project has forced her to reconsider her teaching methods and perfect the art of being both engaging and informative at the same time.

Recording a podcast is different than just recording a lecture, Foy says, pointing out that podcasts are a far more personal form of communication. Reflecting this, she scripts the podcasts in a conversational style that includes repetition of key points where necessary.

"It's a fine line balancing relaxed delivery with focus," she writes. "I aimed to play the mic and not the room, and to speak as though I was having a one on one conversation with the student."

By focusing on little things like removing 'um's and 'ah's, as well as more significant issues such as the tone of her voice and the presentation of the accompanying Keynote pages, Foy has refined her podcasting significantly and is expanding her use of the technology in this school year.

For example, a Valentine's Day tie-in saw her producing podcasts that incorporated Shakespearean sonnets, as well as interviews with artists and other creative types who are involved in preparations for the annual Shakespeare in Queen's Park Festival.

Despite its ups and downs, Foy says her journey into podcasting has been immensely rewarding. "For me, it was very much about trying to diversify my teaching methodology and seeing how it worked for me," she explains.

"It was a resounding success on the one side because it forced me to rethink the materials and how I was presenting them. It is probably going to take a while for everyone to love them - but some people just never will."

Towards a better brain. view

By David Braue



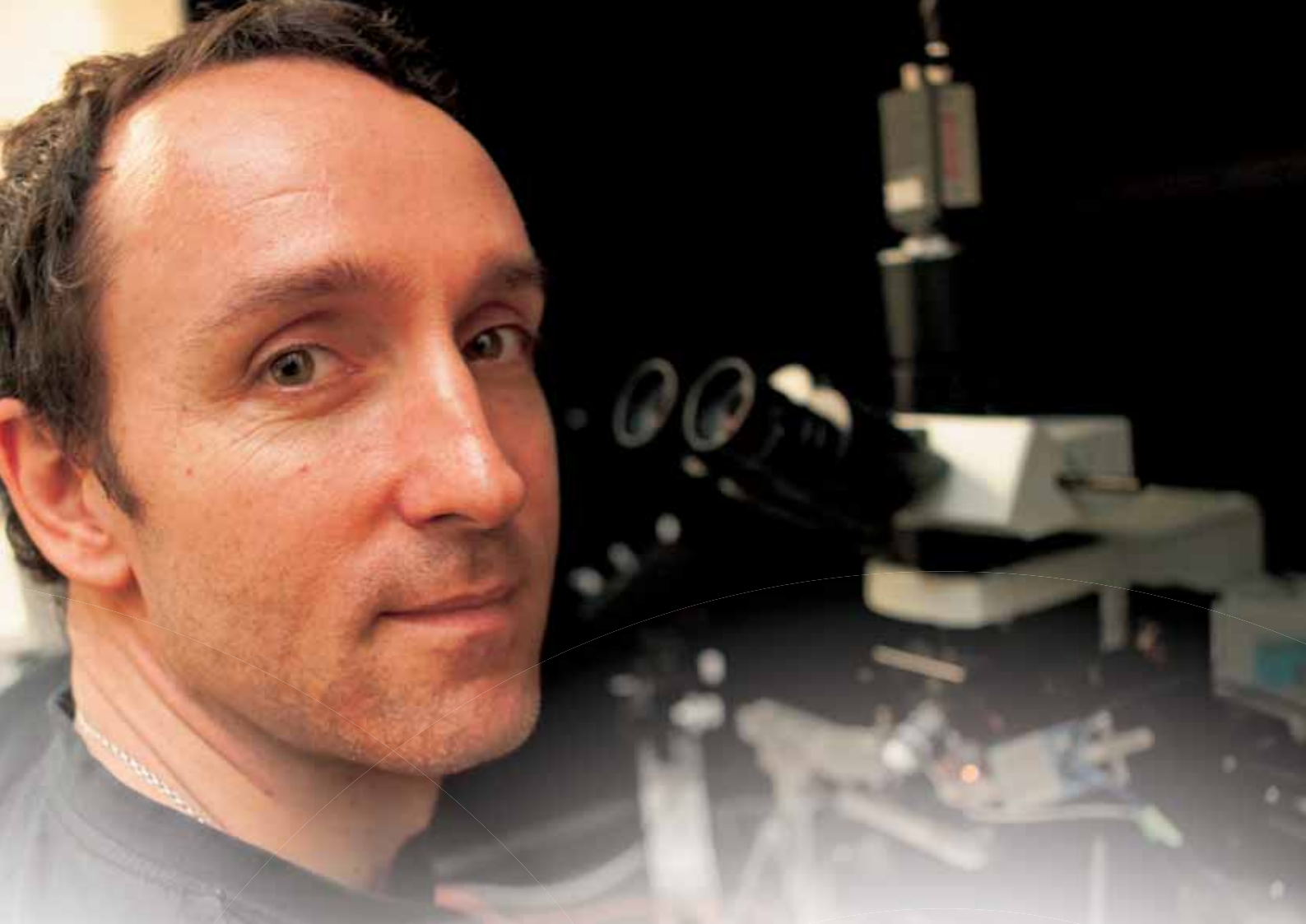
The world has changed a lot since Mac OS 9 was state of the art – but that point was moot for Daniel Conway, an IT staffer at the University of Newcastle, who recently found himself helping researcher Dr Marcus Howlett setting up a lab of old Macs to support his cutting-edge brain research.

Howlett, a postdoctoral researcher within the university's Department of Human Physiology, is conducting extensive animal research to study a particular microscopic brain system in a project he says could eventually have implications for treating a range of addictions.

The system in question involves the flow of calcium, a crucial element involved in the co-ordination of activity between different brain cells. Scientists have long known that calcium is essential to smooth transfer of messages between cells, but still fail to understand how the activities of the more than 50,000 cells in the tiny locus ceruleus can be co-ordinated with pinpoint accuracy.

Howlett's work involves using electrodes to measure the changing electrical potential between the cells, indirectly reflecting the concentration of calcium in the channel between them. During his experiments, the electrodes are linked to AxoClamp 2B amplifier that is, via specialised Digadata 1320 analogue-to-digital conversion boards, linked into a Mac running AxoGraph software using an Adaptec 2930 SCSI card.





“By integrating the data we’re collecting on the Macs, we hope to get a more holistic picture of what we are actually doing to the cell.”

The catch: although the new AxoGraph X application supports Mac OS X, the version of AxoGraph that Howlett needs only runs under Mac OS 9. “Because the A/D digitiser is like a legacy item and the SCSI host adapter card isn’t, the two combined with the software we were running [under Mac OS X] just didn’t work,” he explains. “Some of the technology we were using just hasn’t caught up with the progression in the Macs. Getting newer stuff would mean re-equipping the entire lab.”

This fact led Conway and Howlett on a search across the university – and eBay – to dig up old Mac G4 machines that could be used to run the software, which samples the electrode readings more than 1000 times per second and provides a wealth of presentation and reporting options. Use of Wavemetrics’ IGOR Pro provided a robust analysis tool for the researchers to work with collected data.

In the long term, Howlett hopes to take the research a step further by using fluorescent dyes to illuminate the flow of calcium through the intracellular channels he has been studying. Using confocal microscopy techniques – which use specialised lasers to excite the dye and then record the energy it gives off – the researchers will be able to watch the flow of calcium in real time.

The technique already works well in heart tissue, but transferring it to brain cells has proved to be more complicated than Howlett initially expected. In the long term, however, pairing this visual picture with the AxoGraph readings will let the team interactively monitor both the flow of calcium and changes in its electrical potential. Simultaneous exposure of the cells to various pharmaceuticals will provide insight into their effect on the calcium signalling process.

“By integrating the data we’re collecting on the Macs, we hope to get a more holistic picture of what we’re actually doing to the cell and how this affects its firing rates,” says Howlett. “It’s still early days, but eventually we’re hoping to find new pharmacological sites to treat mood disorders [which are believed to be involved with the locus ceruleus].”



New Apple Technology

Picking up the phone

Apple's new product launches always spark a lot of interest, but enthusiasm was certainly running at fever pitch in January as Steve Jobs unveiled the gadget that everybody had been anticipating for years.

Slated to hit the US later this year and Australia by next year, the iPhone quashed many popular rumours by answered enthusiasts' clamouring for a widescreen, touch-sensitive iPod, wireless Internet communicator, and mobile phone all in the one device.

You've probably heard the specifications, but the iPhone's major features merit repeating. Based on an embedded version of Mac OS X, the device is whisper-thin yet features a 3.5-inch touch-sensitive display that's oriented correctly for watching iPod videos and viewing photographs. Its quad-band GSM phone, 2 megapixel camera with integrated photo browsing application, and robust synchronisation with Windows or Mac OS X computers will make it an indispensable aid for all types of applications.

While it's bound to invoke boundless gadget envy around the university campuses, there are also many useful potential applications for the devices within academic settings.



Full-blown versions of applications including Google Maps, Yahoo! Mail push email, and the Safari Web browser position the phone - which is bound to end up in many uni students' bags within days of its release - as a multipurpose information terminal that could potentially replace notebook PCs for many applications.

With WiFi access built into the iPhone, students will be able to access online email, productivity, e-learning and other applications from the same device as they can use to download podcasts of lectures, collect scientific and research data in the field, and use for applications such as instant messaging to keep up with colleagues and lecturers. The applications, and the possibilities, are endless.



This is the n

This year marks the first time that wireless networking will surpass the speed of most wired networks, with the new 802.11n standard offering up to around 300Mbps of bandwidth and twice the range of previous 802.11g networks.

That's enough bandwidth to stream even high-definition video in real time, which is why Apple's Airport Extreme access point promises to be so important in future wireless development. Based on MIMO (multiple in-multiple out) smart antenna technology and operating in license-free 2.4GHz or 5GHz radiofrequency bands, Airport Extreme includes three 10/100 Mbps Ethernet LAN ports and one 10/100 Mbps Ethernet WAN port.

There's support for Wi-Fi Protected Access (WPA), WPA-2 and WEP encryption, with a built-in NAT firewall for extra security and an integrated USB port that lets the base station wirelessly share any USB-attached printer or external hard drive. Included AirPort Utility software eases setup for up to 50 simultaneous users, and supports configuration of access restrictions as necessary.

From small screen to big screen

Overshadowed by the iPhone's announcement - but equally important for many customers - is the Apple TV, which takes iTunes to the living room in the same way that the iPhone takes it to the street.

Effectively a vastly upgraded version of the popular Airport Express wireless access point, Apple TV incorporates pre-standard 802.11n compliant wireless technology to receive videos and music from up to five iTunes-equipped computers.

With a built-in 40GB hard drive, content can be synchronised and stored for later watching in a variety of resolutions ranging up to digital 720p. The bundled Apple Remote completes the experience, allowing users to navigate their content from the comfort of the lounge-room chair.

The home-entertainment implications of the Apple TV are obvious, but a bit of lateral thinking is likely to turn up even more uses for the technology in university and other settings. The missing link between computer and TV has finally been provided, and its uses are for you to discover.

If you're going to San Francisco...

Eighteen months after the switch to Intel processors was announced, Mac developers are well on top of the implications of the shift. This - and the looming launch of Mac OS X 10.5 'Leopard' - is likely to make this year's Apple WorldWide Developer's Conference (WWDC) a fascinating destination for anyone building apps on Mac OS X, or just interested in the direction Apple technology is going.

More than 100 technical sessions will cover six main tracks: Leopard Innovations, Mac OS X Essentials, Developer Tools, Information Technologies, Graphics and Imaging, and Content and Media. Breakout sessions will offer the chance to hear directly from the Apple technical experts behind the operating system, with varied opportunities for interaction.

For the 2007 WWDC, the AUC will once again reprise its commitment to sponsor staff and students from AUC member universities. WWDC has universally proved to be a great learning experience and is well worth the trip. Applications are open now and deadlines are closing in, so be sure to drop by www.auc.edu.au to find out how you can participate. The conference runs from June 11 to 15 at San Francisco's Moscone Center West. Visit <http://developer.apple.com/wwdc/> for more information.



Rough guide to

MacWorld 2007

By Carrie Osborne, Griffith University

As Steve Jobs stepped onto the stage for his keynote address at the Moscone Centre in San Francisco, the audience cheered in anticipation, their expectations high. In the weeks leading up to MacWorld 2007, there had been an increasing buzz in the Mac community about the possible release of an Apple flavoured phone.

When these rumours were confirmed with the announcement of the iPhone, some people went berserk whilst others sat in awe - but everyone settled down quickly to learn all about this product and its potential. Just hours later, consumers across the world were talking about the iPhone, keen to know just when they would be able to get one (reflected by an instant rise in share values). This set the tone for a very interesting and diverse conference and expo.

MacWorld, of course, is much more than the keynote address. It caters for a wide variety of Mac people with all levels of experience - with an aim to 'sow some inspiration' in 2007. It includes a conference with many different strands, an expo spread across two large halls and plenty of social events too - but the keynote kicks it off.

Many people are drawn to the keynote to experience what is fondly called the 'Steve Jobs reality distortion field', referring to his unique ability to captivate the audience. He delivers an outstanding presentation, by using simple slides and powerful pauses to highlight key facts and, most of all, by making it fun.

This does come through when watching his keynotes online - but to experience it is amazing. For this reason, many people line up in the early hours of the morning and wait in the cold to make sure they get a good seat.

There were two announcements along with the iPhone this year: the release date of Apple TV (including a brief overview of its features), and the company's decision to drop the word 'Computer' from its name to stay relevant with their new line of products. To wrap up the keynote, John Mayer played two songs while the news of the iPhone sunk in, and then the expo was open to the masses.

If you want to discover more on just about any Mac topic, the MacWorld conferences will cater for you - and there are many different tracks to pick from so you can really tailor your learning experience.

The PowerTools conference is geared towards those who use professional applications - from mastering creative applications and video production to scripting, servers and networking. The MacIT conference responds to Apple's growing enterprise focus and is perfect for IT professionals. On top of this, MacWorld offers a user's conference, hands-on Mac labs, birds of a feather meetings, market symposiums and feature presentations. Unfortunately, all of this has to fit into five days and a lot of good sessions overlap, so you have to plan ahead and choose carefully.

The most popular track this year was System Imaging & Deployment - which covered the entire process from planning to maintenance. A variety of angles were covered in-depth without losing sight of the bigger picture.

MacWorld attracts some brilliant speakers from organisations like Disney, MTV and Yale University. These people know their stuff and are great at sharing their knowledge and recommendations on which tools, applications and methodologies to use and when. Most sessions include Q&A time at the end, where you can tap into a wealth of experience to get some invaluable advice.





The MacWorld Expo is the best way to see what cool new products are out there. Admittedly, there was a big focus on iPod gear and a lot of exhibits were very consumer-orientated, but there were some great products on display that could be applied in education and corporate environments. All of this was packed into two exhibit halls: South Moscone Centre accommodated the bulk of exhibitors, whilst North Moscone Centre hosted the Digital Lifestyle Experience. There was a pretty good blend of established companies with new companies and products.

If you weren't at MacWorld for iPod cases, speakers, alarm clock units or toilet roll holders, then you could skip past a lot of exhibits. Of course, the Apple area was very busy for the entire duration of the expo, where people were constantly lining up to get a close-up view of the two heavily guarded iPhones on display in glass podiums. There is no doubt that the iPhone is a fun and exciting product that has the potential to revolutionise the consumer electronics industry like the iPod did.

The Apple TV demo machines were very popular too, where you could play under supervision of Apple staff. There were some interesting gadgets on show, like the first ever Bluetooth in-ear headphones - ety8 by Etymotic Research. Some smaller software developers had a presence on the floor, like Mekentosj - a duo that develops scientific research software - and Unmarked, the creators of TextSoap.

Also on exhibit were a number of security solutions, from firewalls and antivirus to backup utilities. Larger companies showcased their products in elaborate stands; Google was very popular with their Sketchup and Google Maps demo workstations. News of Microsoft Office Mac 2008 (which will be fully compatible with Office 2007 for Windows) brought people over to Microsoft's booth to learn about new features, like the dynamic ribbon toolbar and interface designed to help users discover features.

Now that Intel Macs have been around for a little while, several really good applications for running Windows inside Mac OS X have surfaced and were very popular at this year's expo. Parallels have recently released a new feature called coherency mode, which allows you to run Windows

applications on their own, without seeing the Windows desktop. For its part, VMWare recently stepped into the scene, offering the capability to run virtual machines compatible with VMWare on Linux and Windows platforms. As of MacWorld, CodeWeavers is no longer in beta, and allows you to run Windows applications without a Windows installation or license.

A Google search for MacWorld events in the weeks leading up to the show will reveal plenty of social gatherings. This year there was a walking city tour, a couple of trips to the Apple headquarters and many parties, most open to all MacWorld attendees. These events are the perfect avenue to meet other Mac users and make some good contacts and friends. San Francisco is a beautiful, friendly, vibrant city with a lot of attractions worth seeing if you get any spare time.

MacWorld is an exciting and busy week, where you can get just what you're looking for whether you're a user, an iPod fan, an academic, working in the creative industries or an IT professional. As the organisers have said, they really try to make MacWorld feel like an Apple product, and it does - it's fun, friendly and smart.

“When these rumours were confirmed with the announcement of the iPhone, some people went berserk whilst others sat in awe...”



Catering for the Creatives

By Stephen Johnston

How long is a creative piece of string and how do you measure it?

How do you get funding for a project, the outcome of which might be an emotional experience rather than a tangible result?

And perhaps, even more complexly, how do you make this project available for peer review or get it published given that it may be constructed from many media formats?

These were the recurrent themes that ran through the AUC's inaugural CreateWorld 2006 conference, hosted at Griffith University's Southbank campus on 5th and 6th December. Dozens of delegates, including three AUC-sponsored attendees from each member university, converged on Brisbane for the two-day event.

Professor Stuart Cunningham of QUT, who is also president of the Council for the Humanities, Arts and Social Sciences, set the tone for the conference with his keynote presentation entitled *The RQF and Research in the Creative Arts and Design Disciplines*.

With the new RQF (Research Quality Framework) poised to go ahead, he stated at the outset that "the sticking point has been to conceptualise and implement a successful regime of what counts as creative practice in relation to research".

This theme continued through a diverse program of workshops and presentations, with delegates attending sessions on topics including a hands-on podcasting workshop by Apple's Stephen Atherton, an overview of UNSW's open-source collaboration initiative The Omnium Project by Rick Bennett, Jason Nelsons presentation on experimental interfaces, a hype-free look at the collaboration-driven Web 2.0 by Hank Szeto of Thinking Cap Consulting and Ian McColl of the University of Queensland.

Technical issues around projects such as university-wide lecture capture and establishment of graphics rendering farms were also on the menu, as was Steve Dillon's very educational and entertaining session highlighting progress on a collaborative music performance engine that lets people play together over the Internet.

Designed to tease out the elusive descriptions for creativity and creative quality, the keynote theme was pushed a little further when Assoc. Prof. Andi Spark, Head of Animation and Acting Head of the Griffith Film School, challenged attendees with a comment in her presentation *Creativity and Digital Tools in Screen Media Production*.

"While it is unclear as to whether creativity can be taught, there is no question that it can be developed and supported," she said. "There is also no doubt as well that it can be suppressed and diminished".

Given the general recognition that the current University system does not seem to encourage the idea that being creative is OK, how will higher education respond to the explosion of technologies and opportunities offered at what many see as the dawning of a new digital renaissance?





CreateWorld



Will we see alternative universities set up in immersive environments such as Second Life, where creative anarchy is required to break the confines of restrictive practice?

Rick Bennett from the Omnium project, an ongoing research project investigating online creative collaboration (OCC), notes that technology should be about not replacement, but addition. The philosophy behind the Omnium tools and products seems to reflect this very well, adding not just a means of communication beyond traditional boundaries but adding strong ethics and social responsibility as an intrinsic part of the project's raison d'être.

The AUC Executive had for some time been discussing the necessity of reaching those areas within universities that are hubs of creativity, where technology was being used in different ways to its use in areas such as business or science. Given the success of AUC sponsored

events like X-World and MacWorld, which cater for those closer to the technology than those looking for creative outcomes, CreateWorld was seen as a good start.

The most remarkable feature of this first CreateWorld was the harmonious feeling amongst all attendees, which could not have been foreseen or planned for by the organising committee. The message that came clearly from the delegates was 'don't lose that loving feeling for next year'.

There was a genuine voiced recognition of camaraderie and collegiate spirit, which was taken as a strong endorsement of both the content of the conference and the mix of attendees. Rest assured that CreateWorld 2006 will be used as the template for a bigger and better CreateWorld 2007.



Adding Exchange to Your

Entourage:

By Russell Miller,
University of Western Australia



Russell Miller

To Entourage or not to Entourage?

'Entourage' used to be a dirty word, if you were a support guy trying to look after a crew of Mac users working in an Exchange enterprise environment.

I remember wringing my hands and cursing the lack of functionality for Mac users many a time - and let us never speak of the issues we had with Exchange servers and Mail in 10.3.9! Few users are happy hearing "well, you would probably be better off using Web mail."

One of the problems that many of us face is our disconnection from the Exchange administration process. In many large organisations, Mac compatibility with the Exchange server is a secondary consideration as the majority of the users are Windows based. Without an Exchange Administrator who is a Mac sympathiser, life can be difficult for Apple people.

Entourage is by no means the final solution to all our Exchange headaches, but it sure can take a lot of the pain away. Here, we'll take a closer look at how.

In the beginning...

In the beginning, there was Outlook for MacOS 9. It worked rather well, people got on with their lives and enjoyed MAPI connectivity and functionality that was close to that in the Windows world.

The arrival Mac OS X saw the death of Outlook development, with those who wanted to hold on to it having to use Classic capabilities. Entourage was the OS X native option, but it really did not come up to the mark. Theories abound as to why the rug was pulled from under Apple users, but there are plenty of other places you can read about conspiracy theories and anti-trust lawsuits!

Entourage meandered along, a hillbilly cousin to Outlook. Even the addition of Exchange support didn't make for an easy time for Mac users, so many of us stuck with Outlook on Classic or wrestled third party solutions with varying degrees of success.

The Mac Business Unit at Microsoft (MacBU) had been working on developing Entourage as a more functional client and, with the release of Office 2004, we saw a move to WebDav as the protocol of choice - and light appeared at the end of the tunnel.

By moving from IMAP & SMTP to WebDav when Office 2004 was released, the door was opened to allow Entourage to work basically as a customised interface for Outlook Web Access, sparking the opportunity to include all the calendaring, contacts and messaging. This all sounds nice, but it was sorely lacking in features that Windows users take for granted, and as such was not the solution that many of us were looking for.

The Messiah (SP2)

July 2005 saw the release of Service Pack 2 (SP2), and everything began to come into focus. It was now possible to use Entourage as a client that came very close to the functionality of Outlook. With the increased functionality, Entourage could no longer be looked upon as the poor cousin; while it was (and even after further updates still is) not perfect, it was a great leap in the right direction.

Features introduced in SP2 include: multiple calendars and address books, full delegation, shared folders, setting permissions, mailbox quotas, usable public folders, direct posting, GAL browsing, GAL addressing, permissions in UI, advanced LDAP finds, and password notifications. Further improvements and bug fixes have continued to improve Entourage, although no single update has had the same wealth of positive impact as SP2, and the MacBU should be commended on a job well done.

If this sort of increase in features can be provided mid lifecycle, then the outlook (pardon the pun) for Entourage in Office 2008 appears bright - although many people may be asking why they didn't have all this in the first place.

It's not Outlook but...

Comparing Entourage to Outlook, we find that for the vast majority of users the available features will be more than adequate. It is only when more advanced collaboration features are required, that things become a little thin on top. Users who need advanced booking features will have issues and, although there are workarounds for these advanced user problems, you might be better off with Outlook running under Parallels or CrossOver.

It is, however, getting very hard to say that Entourage is not a completely viable solution from an average user's point of view - and I will be the first to agree that this depends on how your organisation uses its Exchange server. For starters, Exchange server requirements include:

- Microsoft Exchange Server 2000 (with Service Pack 2) or later, for WebDAV support
- Outlook Web Access must be installed and active
- The following protocols must be enabled: WebDAV (used by Outlook Web Access and Entourage 2004) and LDAP



So what is still a headache?

If you work in the type of environment that is set up with resource booking for your meetings then you may be pulling faces and cursing my name right now. There are workarounds using the Microsoft Exchange Server Auto Accept Agent, and while that is not perfect it does the job for most users.

There are also a couple of little things that tend to make life with Entourage less than perfect. Tasks and Notes are not synced with the server, nor are Categories. These are features that really should be there, and I have to say I am at a loss as to why it is not part of the package. Setting an out of office auto reply is another missing feature; you'll still have to hit the web mail for that one.

Future Improvements

With Office 2008 on the horizon, I have doubts if we will see any feature additions for Entourage 2004. However, we can always dream – so here are a few nice touches that I think would make Entourage 2004 even better:

- Multiple calendars viewable on one page
- Server-side save of categories
- Task & Note syncing
- Tidy up calendaring a bit more
- Proper resource handling

Will we see any of this? Not likely, I would say. With all the effort required to bring Office 2008 to market on time, I would hazard a guess that the priority for adding features to a product that will not be on shelves come the end of 2007 is very low.

Office 2008

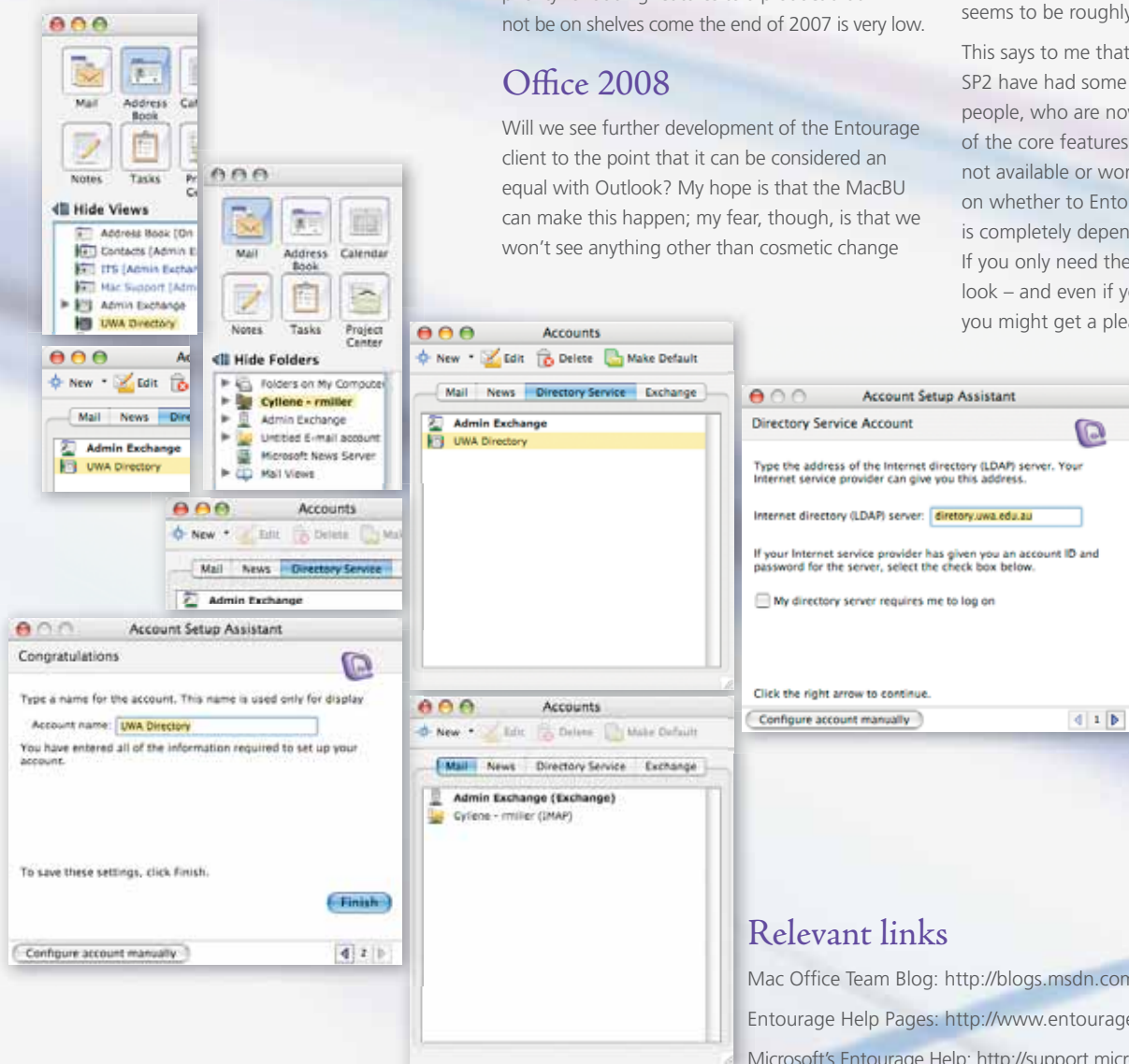
Will we see further development of the Entourage client to the point that it can be considered an equal with Outlook? My hope is that the MacBU can make this happen; my fear, though, is that we won't see anything other than cosmetic change

or - worst yet - removal of functionality as part of a 'rebuild' (have a look at the storm raging over the removal of VBA from Office 12 and you might share my concern). Even after the Office 2008 announcement at MacWorld, the jury is out on this one, and currently Microsoft are being very quiet in terms of Entourage enhancements.

Conclusion

Day-to-day for the general user Entourage finally comes up as a viable solution, but there are still areas that need improvement if Entourage wants to claim a position as an enterprise level Exchange client. I still read forums and message board with people lamenting the lack of MAPI support and declaring that Entourage is useless, and yet there are others who swear by it. This seems to be roughly a 50-50 split.

This says to me that the changes brought with SP2 have had some positive effects for many people, who are now able to take advantage of the core features that previously were either not available or worked poorly. The final answer on whether to Entourage or not to Entourage is completely dependent on your requirements. If you only need the basics it is well worth a look – and even if you call yourself a power user, you might get a pleasant surprise.



Relevant links

Mac Office Team Blog: <http://blogs.msdn.com/macmojo/default.aspx>

Entourage Help Pages: <http://www.entourage.mvps.org/index.html>

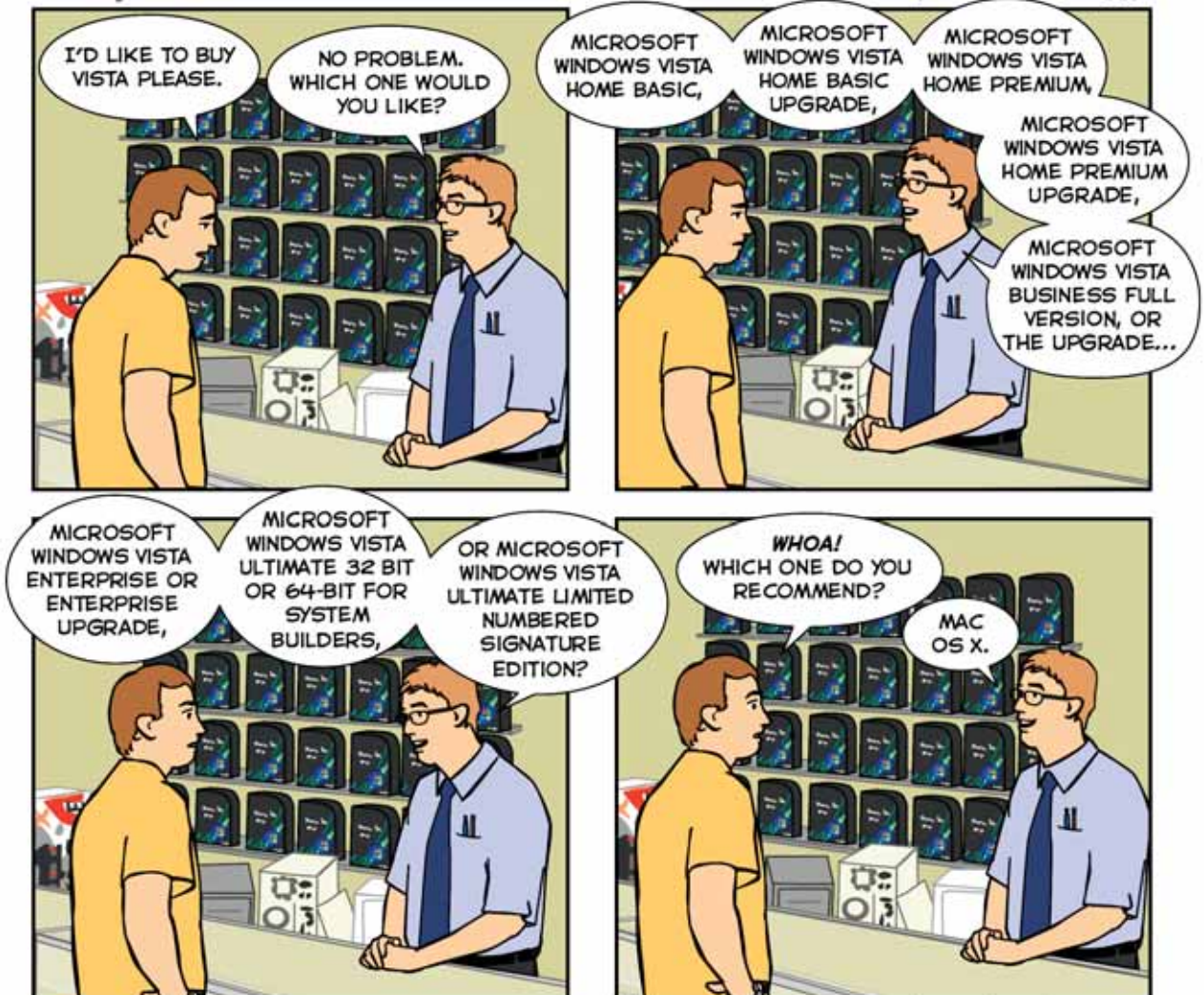
Microsoft's Entourage Help: <http://support.microsoft.com/?scid=ph;en-us;1720>



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iPhone in its drool-proof case!



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CrossWORD Competition



Across

- 2 Google 3D power tool (p13)
- 3 Basis for new wireless (p11)
- 9 Journalism upgraded at this USQ campus (p4)
- 10 Your personal printing press (p2)
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- 19 Locus Conway is studying (p8)
- 22 Sowing this at MacWorld (p12)
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- 25 Quality framework changing pedagogy (p14)

Down

- 1 Newcastle lectures broadcast using this (p5)
- 4 Conway's virtual research assistant (p9)
- 5 Introduced with Office 2004 (p16)
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- 7 Still makes Mac OS 9 shine (p9)
- 8 Collaboration project supports incremental approach (p15)
- 11 Podcasts via ____ Monash (p5)
- 14 Flavours of Windows Vista (p18)
- 15 Jargon to you, teaching for Foy (p7)
- 17 Vision you get from these sunnies (p2)
- 18 This Hank sounded off on Web 2.0 (p14)
- 20 Substance of Shakespearian V-Day podcasts (p7)
- 21 Year ____ eco-students kicked off iWeb trial (p6)



For your chance to win an iPod Shuffle, complete the following crossword (you'll find the answers throughout the articles) and take the letters from the green boxes then re-arrange them to form a word.

Send this to: crossword@auc.com.au

Competition closes at 5pm on 25th May, 2007.



AUC

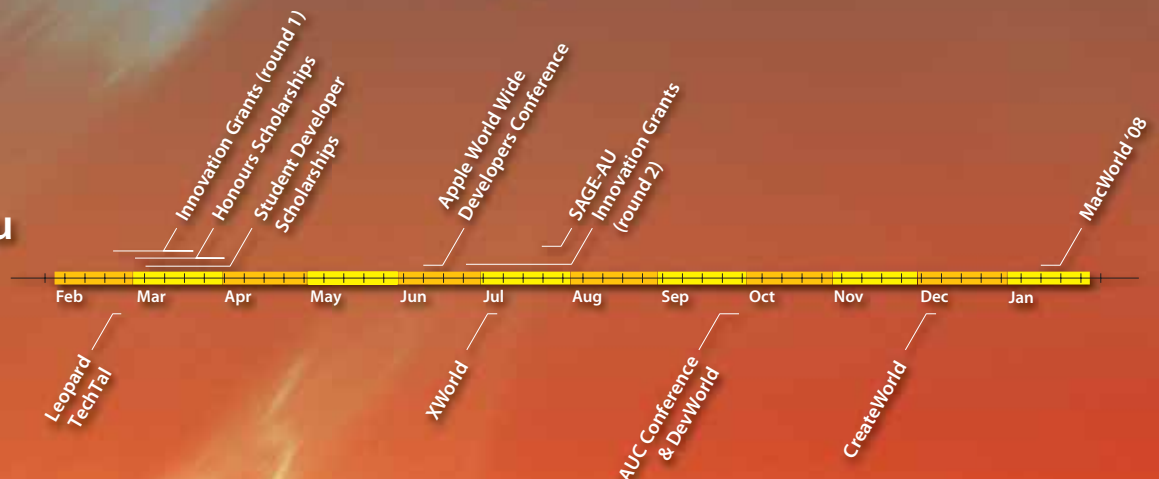
Apple University Consortium

Dates are indicative only, and are subject to change. Programs are only available to bona fide staff and students of AUC member Universities. Most events have long application lead times - see the web site for program details, application forms and updates.

www.auc.edu.au

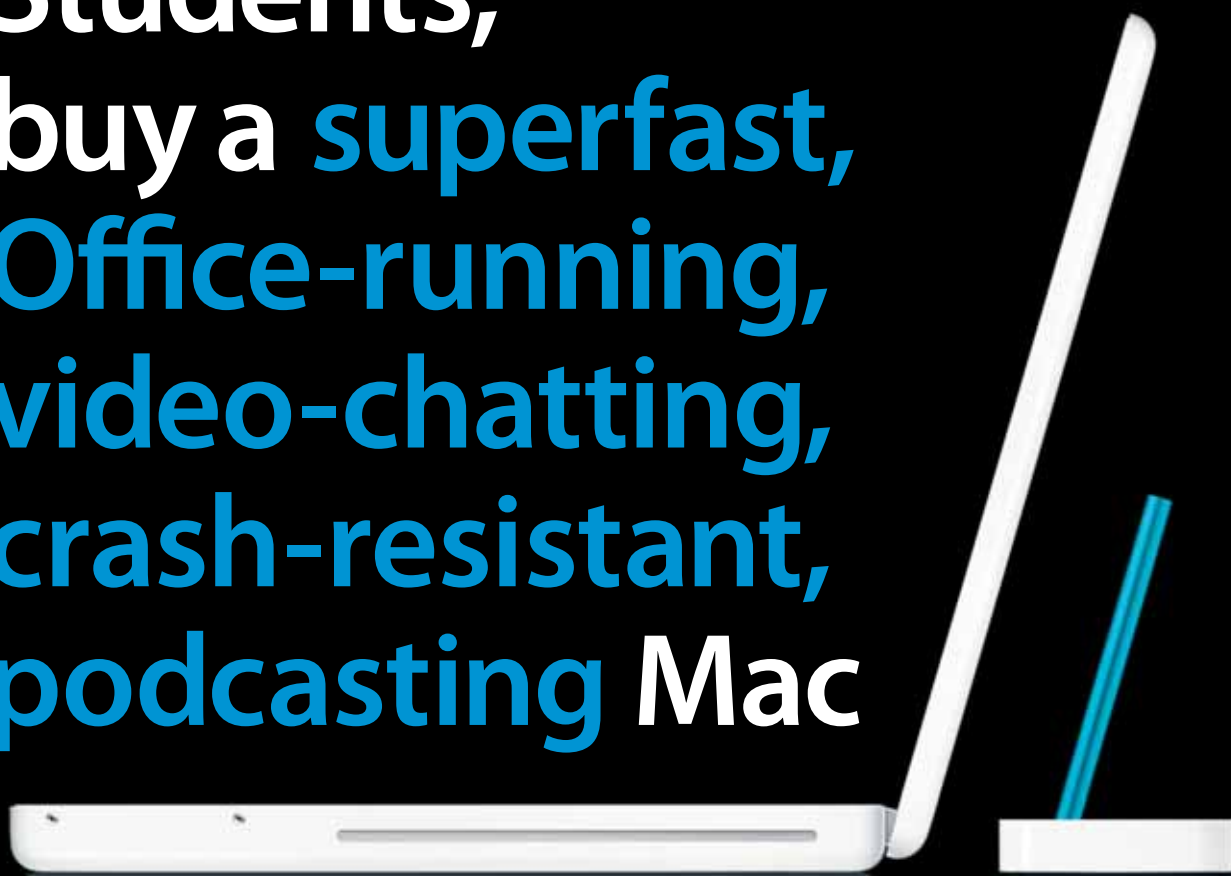
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