

## Other Information and Frequently Asked Questions

### **Purchasing an Apple iPad 2 for Year 9 Students use in 2012.**

#### **Why?**

There were plans to upgrade to Ultra Fast broadband 2013/2014. Many of your students will be nearly finished their education at that stage, so the college paid for this upgrade in order to make broadband available now to our students.

The college currently has an up to speed network. We are connected with fibre by Vector to Ultra Fast broadband and we have a wireless bubble over the school which we will expand in 2012.

This all comes at a cost. Basic desktop machines are getting out of date. We can't afford new machines at the school, yet demand for access to technology keeps growing. Your sons and daughters are getting access to computer technology once, maybe twice per week in different subjects. What we want is one to one access to technology, access to the internet as needed, when needed. We can't afford to do that by ourselves. We need your help. We need you to purchase a one to one computing device, and our preference for that device is an Apple iPad 2.

#### **Why the iPad 2?**

After researching various trials around the world with Netbooks (small laptops), iPads and other devices such as an iTouch, we have come to the conclusion that the iPad 2 is the most suitable machine. One of the main reasons is battery life - 10 hours, compared to maybe 5 hours from a Netbook which reduces very quickly after 6-12 months to about 3 or 2 hours. There is also the massive advantage of the applications (Apps) that the iPad 2 offers, which can be downloaded from iTunes.

The educational advantages and student engagement from some of these Apps is impressive.

#### **But I have just gone out and bought my son or daughter a Netbook – I have just spent \$500 on that device, now you are telling me I have to buy an iPad 2 as well?**

No, certainly not. The Netbook is great, and your son or daughter will be able to use that on the school network. The only difference will be that they will not have the educational applications of the iPad 2. The teacher will have an iPad 2, the Apps will be projected up to the data projector, and students will be able to access similar tools.

#### **So you are allowed to have laptops at school now? What's the difference?**

Currently not many students bring laptops to school, therefore teachers are teaching in much the same way as they have always taught. Digitalisation of current teaching is happening in the classroom to a degree, eg the data projector, the Ultranet. When asked, teachers say why would I do anything different when only 5 or 6 students in my class bring laptops to school.

Likewise, when we asked the students why don't you bring a computer to school, the answer was "Why would we, there is no point. Teachers don't do anything different. They still give us paper handouts, and still expect us to hand in work on paper". Fair call – it's a chicken and egg. We have to break that cycle. Both parties would gladly move to a more IT rich environment of learning but we have to get the one to one situation started.

#### **What about security? My son or daughter will break their iPad 2, drop it, lose it – someone will steal it – it's going to cost me a fortune.**

We would hope most people would look after their expensive electronic equipment like they do with their phones. They look after it and they keep it safe. Part of learning in life. Part of when we grow up, we will be given expensive equipment, and it is up to us to look after it. I vividly remember getting my first calculator – an old light emitting diode machine worth \$110 in 1976, money that my parents couldn't afford. I was basically threatened with my life if I damaged or lost it. I had to respect that. That is part of learning, part of life.

Experience from Wellington High School Epson Girls and Kuranui College in the Wairarapa has been that security and care has not been the issue as initially thought.

In addition to that, there will be depositories around the school where students can hand their iPad 2's in to be locked away in a safe place and retrieved after lunch, interval or after their Physical Education classes.

We would advise parents to purchase a suitable protective cover. A free App is available to track the iPad 2 if lost or stolen.

### **What about NCEA exams and writing with pen and paper for 3 hours?**

Of course the physical act of writing will still be part of teaching and learning at Orewa College. However what is important is the quality of the students thinking and the use of one to one computer devices has shown (especially with boys) to improve the quality of thinking and writing electronically. Students are more likely to review and change their writing and thinking if it is in electronic format. So if we are teaching the students to think better in their heads, through this rewrite process on an electronic device, when eventually it comes to a three hour exam the physical act of writing that has been practiced will be supplemented by clearer and more concise thinking.

### **What about brain damage or health issues with wireless technology?**

With the use of notebooks within the College we are constantly aware of both the ergonomic and environmental issues that may arise with their use. We are constantly monitoring the standards issued by the agencies concerned with wireless technology and are in contact with similar schools within New Zealand who also use Wi-Fi in the classroom environment.

The College wireless infrastructure is designed so that all AP's (wireless Access Points) in the classroom are more than 2 metres from any student or staff member. The output of each device has been lowered for more effective use within each classroom. The lowering of the output also reduces the Wi-Fi emissions from each device.

The National Radiation Laboratory has carried out tests that showed "extremely low exposures of radiation from Wi-Fi". Mr. Gledhill from the NRL also stated recently that "typically we are looking at about a thousandth of one per cent of the limit recommended for the public". The College is aware of the recent reports from the BBC and questions have been raised both here in New Zealand and in the UK about the recent scientific procedures followed during their report.

### **The research shows educational benefits of one to one devices are:**

- They give students access to anywhere, anytime learning.
- They enable students to learn independently, collaborate with peers and communicate their understandings using rich media.
- They complement the existing school curriculum by providing digital learning tools that link with planned classroom activities.
- Their use in the classroom will evolve as students and teachers become familiar with the new tools.
- Improved student attendance and motivation and achievement

### **What about battery life? iPad 2's are sealed units and the battery can't be replaced.**

Yes it can just not by you. You can get them replaced at your Apple dealer. The battery lasts 10 hours on one charge and is rated for 1000 full cycles that is 1000 full charges. It is a little complicated how all this works but that is usually AT LEAST 3 years of good operational use.

After that the battery time that you get out of a full charge will deteriorate but still be useable. Our advice and observation and research of literature shows this to be far better than a Netbook.

### **What about the security of my work?**

Your son or daughter's work will live on their ipad just like a Netbook. An application called a "drop box" (free) is one method to store information. Google docs is another way of storing information.

### **Is there a danger that emphasis may shift from the basics of the "Three Rs" to using these devices?**

No. Using ICT and technology enhances learning if used wisely. Good teaching using the best tools at hand is our goal. Yes, the way our teachers teach and our students learn will need to shift a little, but in general the technology will enhance learning as it does now in the school. The current problem is that demand greatly exceeds the access.

### **Will I still need a calculator?**

The calculator scenario is similar. Schools used to provide class sets of calculators. This became unsustainable and students were required to purchase them.

The iPad 2 has a free calculator app, or various calculator apps that can be purchased including graphics calculators. The cost of an app is considerably less than the cost of an actual calculator and can be shared amongst four other people.

### **How much do the Apps cost?**

The students will be required to purchase some predetermined apps for each subject, as well as some core apps. In some cases those apps will be free, in others there will be a cost. This cost is off set by the fact some subjects are already saying students will not have to purchase homework books or text books. Legally, you are allowed to distribute that app to five other machines. So a \$10 app can be shared with five people \$2 each (we will show students and parents how this works).

**What about upgrades? Will I need another better model in 2 years?**

No, it is the same as any technology; once you purchase it then something better will always be around the corner. But the operating system will remain useable. The battery, the apps and the connectivity to the internet all will remain useable. There may be one or two improvements in newer versions but the model you buy will be fine.

**So you have convinced me. I have to buy an iPad 2 for my children but I can't afford \$800. How am I going to do that?**

Options are available.

- You either go out and buy it from a retailer – expensive outlay right at the start
- Work with your student to develop a saving plan, there is seven months before Term 1, 2012
- Retailers do offer flexi rent where you own the machine, but you pay a very high interest rate
- We have enclosed information on purchasing options from Cyclone Computers, that are approximately \$10 per week

**I want to get an iPad 2 now. How do I do it?**

Cyclone computers will soon offer an on line order system. In the meantime, you can email Cyclone Computers [marym@cyclone.co.nz](mailto:marym@cyclone.co.nz) . To take advantage of the options available on the brochure, you must inform them that you are from Orewa College. Please be aware the supply of iPads is slow at present after a fire in China destroyed a supply of parts.