Flemington Primary School

1:1 iPad Program

“Igniting Curiosity”

‘I have no special talents. I am only passionately curious.’

Albert Einstein, 20th Century Physicist
At Flemington Primary School we understand that the need of up to date technology for learning is not optional. Technology now forms a vital part of a high quality, fully rounded education in the 21st century. Young people are now using mobile technology to assist them in life and learning. We believe students must be able to access digital information, tools and resources from anywhere, any time and in ways that lead to a deeper engagement and understanding.

Today’s students think, connect and communicate differently to even only several years ago. We are aware that our students live in a world where information can be accessed and shared quickly over the Internet, where they can communicate with peers and create new knowledge. As technological trends continue to expand and grow, so does the need of our students. With the introduction in to the world market of tablet computing and mobile device technology, we as a school need to ensure that our students are using rich and relevant technology to complement their learning.

We want our students to strive for excellence through a personalised learning program that integrates the curriculum and fully exploit the use of Information and Communication Technology (ICT). The use of an iPad to assist this, along with countless online applications and social media/networking tools will ensure that we are preparing our students for a new era in personalised learning and digital creation.

We would like parents to be informed and to understand the learning and teaching philosophies and reasons that underpin our decision to undertake a 1:1 iPad program. Naturally, there is going to be a cost involved, but we are looking to ensure that the first and foremost consideration is – “what is best for our students’ learning?”

The following pages provide families of students currently in year 4 with some background information about the 1:1 iPad program.

At the information session we will provide parents with information that will help everyone to understand the program and its value as a teaching and learning tool. We have also included options for families on providing an iPad for their child. There will be an opportunity for you to raise questions which we will certainly do our best to answer and provide appropriate information.

Since 2011, staff have been involved in professional development sessions related to enhancing digital learning in the classroom, and with the iPads since 2012. The new eLearning Plan (eLearning includes the exploration and use of diverse ICT strategies and tools to expand teaching and learning possibilities in ways that lead to improved student learning outcomes) that ensures ICT becomes an integral part of teaching and learning and students are developing 21st Century skills.

Twenty-first Century learning is about engaging in learning, thinking, problem-solving, collaborating, creating, authoring and independent learning in a global transcultural world. In the future your children will be working in jobs that don’t yet exist; solving problems that we don’t even know are problems yet!

We trust that you will find the 1:1 iPad program and the opportunities it will provide for our students as exciting as we do and look forward to sharing our program with you.
Learning in a 1 to 1 environment can open up new possibilities for learning or make it easier to exploit existing learning opportunities. We have the power to motivate students and bring education to life with a more engaging and interactive curriculum.

**Student Engagement**
To inspire and engage this new generation of learners, government, educators and experts are investing in the exciting opportunities of 1 to 1 learning. They have recognised that schools can either capitalise on young people’s affinity for technology or prepare them for an increasingly technology driven world—or struggle to engage them as technology advances.

‘I think I learn better using technology than just sitting in the classroom and being told what to do because it gives me more flexibility and responsibility. I’m in control of my own learning which enables me to learn how I best learn and get the most out of my learning experience.’

*Victorian government school student*

**The National Curriculum and ICT**
Students develop ICT competence when they learn to:

**Investigate** - using ICT to plan and refine information searches; to locate and access different types of data and information and to verify the integrity of data when investigating questions, topics or problems

**Create** - using ICT to generate ideas, plans, processes and products to create solutions to challenges or learning area tasks

**Communicate** - using ICT to communicate ideas and information with others adhering to social protocols appropriate to the communicative context (purpose, audience and technology)

**Operate** - applying technical knowledge and skills to use ICT efficiently and to manage data and information when and as needed

**Apply** - appropriate social and ethical protocols and practices to operate and manage ICT.

**Our 1:1 iPad Program will help us achieve this by:**
1. Providing students with access to their own iPad device. This will ensure that students can create, collaborate and have access to ‘Anytime, Anywhere’ learning.

2. Providing wireless Internet access that connects all students to local and global communities.

3. Allowing students to access information at hand and to demonstrate their understanding of the curriculum.

4. Providing all students with opportunities for rich and relevant learning that is engaging, promotes excellence and is personalised.

5. Adopting a challenge based learning (real life, applied and authentic) model that makes effective use of use technology commonly used in daily life to improve student learning outcomes.
Challenge-Based Learning

*Challenge Based Learning is a collaborative learning experience in which teachers and students work together to learn about compelling issues, propose solutions to real problems, and take action. The approach asks students to reflect on their learning and the impact of their actions and publish their solutions to a worldwide audience.*

Challenge Based Learning mirrors the 21st century workplace, requiring students to:

1. Work in collaborative groups
2. Use technology commonly used in daily life
3. Tackle real-world problems using a multidisciplinary approach
4. Share the results with the world

The Process

1. Challenge Based Learning begins with a big idea and cascades to the following: the essential question; the challenge; guiding questions, activities, and resources; determining and articulating the solution; taking action by implementing the solution; assessment; and publishing the solution and sharing it with the world. Reflection and informative assessment are an important part of the process at every stage as they reinforce learning and prepare students for what is coming next.

2. Challenge Based Learning changes as students progress through its stages. Early on—when teachers introduce Challenge Based Learning and set up the challenge—they are making decisions, communicating information, teaching skills, and answering questions about how the process works and what is expected of the students. In the middle stages, students take charge of planning and researching their own work. Teachers serve primarily as a project manager and mentor working alongside the students, helping them through the rough spots and keeping them on track. In the later stages, students are deeply engaged in their own work while teachers ensure that they have mastered the required knowledge and skills through appropriate assessments. Finally, teachers will transition into the role of product manager supporting the students as they implement, evaluate, and publish their solutions and results.

3. Challenge Based Learning emphasizes exploring topics from many angles and through the lens of multiple disciplines, which allows students to appreciate the natural connections between subject areas that might not always be evident. Just as working in collaborative groups teaches students important life skills, teachers who have implemented Challenge Based Learning in teams report that collaboration with other teachers is one of the most beneficial and enjoyable aspects of the approach for their own professional growth and development.

Access to Technology

Challenge Based Learning requires real-world tools, so teachers and students need access to technology that is commonly used in 21st century life and work. This ideally includes computers, rich media creation tools, the Internet, and mobile devices for anytime, anywhere access to information, content and communication.
Why an iPad?
This investigation was held prior to the introduction of iPads in 2011. There were pros and cons for iPads compared to laptops or Netbooks. The main rationale was that iPads do not require us to purchase or install additional servers to store student work, data or images; and no additional networking is required, and that the students had access to all their work on a single device 24/7.

Minimal Technical Support Required: The iPad needs little if any maintenance and installing the software is simple, quick and easy - there is little need for any technical support. This is important because it puts the learner, teacher and school in control of their technology.

Range of Applications: Educationalists work with developers to create new and innovative software which reflect the learner’s needs and expectations in technology. Essentially the iPad is a tactile and engaging mobile device which could transform the way people learn.

Instant-on & all-day battery: Young people (rightly) expect devices to come to life at the press of a button. It’s possible to get on the net and find the information you require using an iPad before a laptop has finished running through its boot-up sequence. Using a device all through the school day without having to charge it up saves a huge amount of time for teachers and learners.

Auto-Save: The apps which run the iPad (and other iOS devices) signal the way forward when it comes to saving work learners produce and create. Saving files takes place automatically ‘behind the scenes’ constantly in the background, which means learners (and teachers) know their work is always safe. No more excuses like ‘I forgot to save my homework’ etc. anymore!

Contextual Learning: The form factor, battery life and apps mean that the iPad can be an ‘anywhere anytime’ learning device. This makes it ideal for projects and learning which take place both in and out of the classroom.

When all the potential functionality of the iPad is added up, its form factor, the iOS, the cameras, and the apps, it becomes clear that the iPad is a Personal Learning Studio. It can be a science lab, literacy tool, research station, history archive, language lab, art canvas, music studio, video editing suite, games console and library.

For information about how iPads and learning please visit the following link:
iPads For Learning Trial Report

As part of its continued focus on the effective use of technology in schools, the Department of Education and Early Childhood Development (DEECD) examined how iPads can be best used for education. An Australian first, the ‘iPads for Learning’ trial examined the impact iPads have on students’ learning at home and at school, as well as how they can benefit and transform teaching.
iPads for Learning Trial - Report

To prepare students for the knowledge economy of the 21st century, schools must provide students with purposeful access to ICT that increases their participation, engagement and achievement in education. The Department of Education and Early Childhood Development’s (DEECD) 2011 iPads for Learning – In Their Hands trial placed over 700 iPads in nine primary, secondary and special schools and the Royal Children’s Hospital Education Institute. The trial examined the use of iPads by students and teachers, and found that under the right conditions the iPad can significantly enhance teaching and learning outcomes within and beyond the classroom.

DEECD’s 2011 iPads for Learning – In Their Hands trial investigated the capacity of iPads to:

- increase independent and self-initiated learning among students
- increase student motivation and active engagement in learning
- improve teachers’ capacity to plan for and meet individual student needs
- improve student learning outcomes
- extend students’ learning beyond the classroom
- improve parental engagement in learning and strengthen home-school links.

The trial has shown that all of these outcomes can be achieved through the effective use of iPads. But it is quality teaching and support that makes this possible, not just the device.

1. The iPad (as a device) has functionality and features that enhance its use as an effective and engaging learning tool.
   a) The iPad is easy to use. It is intuitive and users of all ages and abilities (including children with learning difficulties) do not require special training or professional learning on how to turn it on, navigate through and use apps, and maintain the iPad (i.e. charge and sync the iPad, update apps).
   b) The touch-interactive flat screen tablet with pinch in/pinch out functionality provides students with autism, ADHD, Aspergers, visual disabilities and poor fine and gross motor skills with more efficient access to effective learning opportunities.
   c) High speed access to online information enables more self-directed learning and rapid access to a fast-growing market of relevant and regularly updated educational apps.
   d) Portability enhances collaboration between students and communication between students and teachers, increases parental engagement in learning and strengthens home-school connections.

2. The iPad is just a device. It is just another tool (albeit a powerful ‘anything anytime anywhere’ tool) in the teaching and learning toolkit.

3. Quality teaching is (as has been found in other studies) the factor which enables the iPad to be used effectively to improve student motivation, engagement and learning outcomes.
   “Learning will only be 24-7 if what students are learning is intriguing and engaging. Curriculum drives 24-7 learning, not the device.” (Teacher)
   a) Teachers used the iPad to meet the specific learning needs of students and support
engaging, interesting and collaborative learning.
b) Students used the iPad to take greater control of their learning, using a single device to search for information on the internet, practise specific skills with selected apps, create keynotes and multimedia presentations, and present and share their learning with their peers, teachers and family.
c) Teachers found the iPad to be an especially valuable learning tool for students with special learning needs due to the combination of its design features, multi-functionality and access to specific purpose apps.
d) Students used the iPad to improve their learning outcomes, especially in literacy, numeracy, communication and thinking skills.
e) The iPad was used to extend learning beyond the classroom, facilitating learning wherever the student had the iPad (at home, at camp, on an excursion) and increasing parental engagement in learning.

4. 90% of students said that learning was more fun when using the iPads.
   - 76% of teachers said that students had (to a ‘great’ or ‘large’ extent) greater choice and flexibility in their learning.
   - 85% of primary teachers and 90% of special school teachers thought that students were more motivated and engaged in learning, vs 32% in secondary schools.
   - 67% of teachers said that use of the iPad had improved their effectiveness as teachers, and 75% were using ICT more effectively in teaching and learning.
   - 83% of primary teachers and 67% of special school teachers thought that using the iPad had improved students’ literacy outcomes, vs 16% in secondary schools.

5. Teaching and learning success with iPads is more likely where they are used in a supportive school and home environment.
   a) School leaders actively encourage the purposeful use of iPads as a strategic support for improving student outcomes, and facilitate teacher access to pedagogically-focused professional learning opportunities.
   b) Students and teachers have timely access to quality technical advice and support. Once set up, the iPad requires less technical support than similar devices, but a 1:1 ICT roll out can put stress on a schools’ ICT infrastructure (e.g. network, bandwidth).
   c) Parents are informed about and understand the way in which iPads will be used to support their child’s learning, participate as necessary in maintaining the device as ‘ready for learning’, and take an active interest in their child’s learning.

6. iPads in the trial had a significantly greater educational impact (and were more successfully implemented) in primary and special school settings than in secondary schools.
   a) This was in part related to structural differences between contemporary primary and secondary classes. That is, a primary teacher has a dedicated class of students and can more easily incorporate cross-curricular learning and inquiry based learning into everyday practice, with the iPad ever-present as a learning tool. Secondary students have multiple teachers timetabled to independently deliver specific subjects.
   b) Primary and special school teachers in the trial also demonstrated greater preparedness and capacity to incorporate the effective use of iPads into learning and assessment activities. They taught lessons where students could choose to use the iPad to facilitate, enhance and share their learning. Teachers in secondary schools were more likely to use the iPad as a simple substitution device (e.g. just to search the internet).

The iPads for Learning Trial reinforces that quality of teaching, combined with purposeful and effective use of ICT contributes to improved learning.
How Can I Provide an iPad for my child?

Below we have listed the options available to provide your child with an iPad for 2015. As students require an iPad with an inbuilt camera it is important to note that the minimum model required is the iPad (with retina display) 16GB WiFi. This is the suggested model for parents to purchase and the prices below relate to this. We would prefer students not to have iPad Mini due to the screen size. The iPad 3 which many students currently have is suitable, as are the latest iPads.

1. My family already own an iPad (with a built in camera) which my child can use at school.
   For families that already own an iPad, the iPad provided for student use would need to be made available each school day. Obviously it would also contain that child's apps, photos, videos and any other school work they produce.

   This will need to be taken into account when deciding whether to buy a new iPad for that child or allowing them to use the existing one that your family owns.

2. Retail Purchase
   Parents/families have the option to purchase an iPad device at a retail outlet such as JB Hi Fi, Harvey Norman, Big W or through the Apple Retail Store online. Additional costs such as screen protectors, covers and any additional accessories will obviously be additional costs. We strongly recommend a sturdy case. Devices that are purchased through a retail outlet can be models ranging from an iPad (with retina display) 16GB Wi-Fi device, to an iPad Air 64GB WiFi 3G device.

iTunes Account
   An iTunes Account is necessary to purchase apps for your child’s iPad, we recommend using an iTunes Gift Card with this account, don’t link to your credit card.

   The card should be valued at approximately $20 and will be used to purchase the applications required at school. This card will be linked to the iTunes account that the iPad will run on.

   A list of the required, free and purchased APPS will be provided for you before the end of Term 4 2014.