

# Burrendah Primary School

## Bring Your Own Device (BYOD –iPad) Program

### THE WHY

#### Vision

As a school we aim to engage our students as life-long learners and prepare them for the future work force.

To flourish in a complex and ever changing world, employers have highlighted the need for the competencies of **collaboration, communication, creativity and critical thinking**. To develop these competencies and engage students, the school seeks to embrace **21<sup>st</sup> century learning environments, pedagogical practices and digital learning**.

#### 21<sup>st</sup> century learning environments focus on:

- Collaboration between teachers, students and the community to access the wealth of knowledge that exists in the world.
- Providing opportunities for students to communicate, create, reinvent and redefine ideas, knowledge and information.
- Engaging, authentic (real world) and relevant learning experiences.
- Access to information – anywhere anytime.
- Promote student voice – expressive & receptive language, metalinguistic awareness, sharing of ideas and immediate student feedback.

#### 21<sup>st</sup> century pedagogical practices focus on:

- Critical and creative thinking (see WA Curriculum below).
- Draw upon 16 Habits of Mind and de Bono's Six Thinking Hats as organising elements and Bloom's Taxonomy as a learning continuum to promotes higher order thinking.
- Applying the SMAR model to ensure learning is enhanced through instructional technology.
- Use digital technologies as a tool to facilitate ideation and creativity as opposed to simple recall and content consumption.

#### 21<sup>st</sup> century digital learning focus on:

- Using digital devices as a lever to engage students in learning.
- Catering for different learning styles and abilities through curriculum differentiation (SAER to GAT).
- Teaching ICT Capabilities across learning areas (see WA Curriculum below).
- Effective communication that fully utilises interactive and multimodal software.
- Digital Technology to be woven into all learning areas (see WA Curriculum below).
- Digital devices to encompass a range of tools – robots, 3D printers, laser cutters, interactive LED screens and iPads (camera, video & sound recording) etc.

#### Western Australian Curriculum

In recent years, the Western Australian Curriculum has been reviewed so that it meets the future needs of our students as they enter the work force. In response to this need, Technologies (Digital Technologies & Design and Technologies), ICT Capabilities and Critical and Creative Capabilities, provide opportunities for the effective and appropriate use of technologies to access, create and communicate information and ideas, solve problems and work collaboratively.

Our mandated commitment to teaching the Western Australian Curriculum – Digital Technologies effectively in the classroom, requires that is interwoven within all learning areas as a tool to enhance learning. Logically this requires planned and spontaneous usage as we would expect in student's future work place. To make this possible we are recommending that all students from

Year 4 – 6, will over time, have access to their own device. From Year K – 3 we will allocate our current resources to ensure they also have improved access to digital devices.

### **Curriculum Links - Information and Communication Technology Capabilities**

Overarching the learning areas of the Western Australian Curriculum is the Information and Communication Technology (ICT) Capabilities, which needs to be woven into the learning curriculum. Importantly, the word, “woven” is critical to the teaching of ICT Capabilities as it is not a learning area and needs to be integrated into the teaching of Technologies (Digital Technologies, Design and Technologies) and other learning areas (Mathematics, English, Science, Physical Education & Health, The Arts, HASS and Languages).

To participate in a knowledge-based economy and to be empowered within a technologically sophisticated society now and into the future, students need the knowledge, skills and confidence to make ICT work for them at school, at home, at work and in their communities. Information and communication technologies are fast and automated, interactive and multimodal, and they support the rapid communication and representation of knowledge to many audiences and its adaptation in different contexts. They transform the ways that students think and learn and give them greater control over how, where and when they learn.

The ICT Capabilities provide teachers with a learning continuum to embed the following skills and understandings across the many contexts of learning:

- **Applying social and ethical protocols and practices when using ICT**
- Investigating and researching with ICT
- Creating ideas and solutions with ICT
- Communicating and collaborating with ICT

It is important to note, from a parent’s perspective, that the teaching of **applying social and ethic protocols and practices** is critical for students to remain safe in an online environment. These skills need to be taught in context whilst been guided by parents and teachers. As Jocelyn Brewer (cyber psychologist) states, “The goal of parents and teachers is to ensure young people learn healthy habits early that will sustain them during their school years, and prepare them for a rewarding engagement with technology throughout their lives”.

For further information about Burrendah Primary School’s ICT Capabilities Scope and Sequence, please refer to the following link:

<http://www.burrendahps.wa.edu.au/sites/default/files/ICT%20Capabilities%20Scope%20%26%20Sequence.pdf>

For further information about key ideas for ICT Capabilities and organisation of the five interrelated elements to the learning continuum, please refer to the following link:

<https://www.australiancurriculum.edu.au/f-10-curriculum/general-capabilities/information-and-communication-technology-ict-capability/>

### **Curriculum Links - Critical and Creative Capabilities**

In the Western Australian Curriculum, students develop capabilities in critical and creative thinking as they learn to generate and evaluate knowledge, clarify concepts and ideas, seek possibilities, consider alternatives and solve problems.

The imparting of knowledge (content) and the development of thinking skills are accepted today as primary purposes of education. The explicit teaching and embedding of critical and creative thinking throughout the learning areas encourages students to engage in higher order thinking. By using logic and imagination, and by reflecting on how they best tackle issues, tasks and challenges, students are increasingly able to select from a range of thinking strategies and employ them selectively and spontaneously in an increasing range of learning contexts.

At Burrendah PS critical and creative thinking skills draws on foundational and recent international and national research that draw upon organising elements, such as Costa and Kallick's 16 Habits of Mind and de Bono's Six Thinking Hats along with learning continuums, such as Bloom's Revised Taxonomy, which promotes higher order thinking as opposed to simple recall and content consumption.

For further information about 16 Habits of Mind, Six Thinking Hats and Bloom's Revised Taxonomy, please refer to the following link:

<https://www.createl.com.au/assets/files/Thinking%20Tools.pdf>

Using digital technologies across learning areas that utilises integrated applications (e.g. MS Word/Pages, MS Excel/Numbers, PowerPoint/Key Note, Adobe Premiere Pro/iMovie, Boom 3D for WIN/Garage Band) and multimodal (e.g. oral language, graphics, text, audio, videos) presentations have proven to enhance critical and creative thinking skills and promote collaboration which are central to 21<sup>st</sup> Century skills needed for the future work force.

## WHAT DEVICE & WHY

### Digital Devices

At Burrendah Primary School we have a range of digital devices to enhance learning, such as notebooks, desktops, iPads, 3D printers, cameras, robots and interactive whiteboards (IWB). After a thorough recent review of numerous schools' core device we decided to move towards one platform which was Apple - iPads.

The decision to move towards one platform was based on the need to manage the school's infrastructure, technical support and associated costs more efficiently. It is also important to note, that historically schools which have attempted to run a range of BYODs have failed because of the costs and complexity of running several platforms.

In terms of the selection process for the iPad, the Technologies Committee reviewed a range of devices based on the following selection criteria: purchasing, service & maintenance, app control, life span, reliability, pricing & leasing, interactivity of software, professional learning for teachers, technical support, ease of use & portability and connectivity. From this review, although some devices were equal, it was clear that the iPad met all the demands and requirement of the primary school context above other devices. In sum, the iPad have proven to be a highly reliable and robust device which uses interactive and intuitive software at a reasonable price. App control from a school and home perspective is superior to the android market. Technical and professional learning support is excellent and already established at the school. In addition to this, the iPad supports the Microsoft 365 Stack which gives the flexibility of students learning both platforms.

Within the review of devices, it also became clear that we needed to upgrade our aging fleet of interactive whiteboards (IWB) with LED displays and Smartboard educational software. These interactive boards now offer the ability for children to share their work on an iPad with a 'flick of a finger'. This facility empowers student's voice by building expressive and receptive language skills, metalinguistic awareness, sharing of ideas and enabling constructive feedback. Furthermore, students become stakeholders in their own learning, demonstrate deeper engagement and enriched participation in the classroom activities.

### Planned Integration into the Classroom

As in any classroom, there will be times when students work independently or collaboratively using their iPads. Depending on the learning focus, students will use iPads for planned and incidental use. Importantly, best practice is defined by the integration of technologies across learning areas (Mathematics, English, Science, Technologies, Physical Education & Health, The Arts, HASS and Languages) as a tool to enhance student learning. This is reflected in our focus on only using productivity apps, such as Pages/Word, Numbers/Excel, Keynote/Power Point, iMovie, Garage

Band, Clips and coding apps. Through these programs students are taught how to be creative problem solvers rather than just consumers of content and engage in higher order thinking rather than simply substituting one task for another.

## TEACHER'S READINESS & TRAINING

### Professional Learning

Central to the successful introduction of the BYOD iPad program, is that teachers are trained in the effective use of technologies to enhance learning and are exposed to models of best practice (SMAR Model and Blooms Taxonomy). For that last four years teachers have been engaged in developing an understanding of how to implement the new Technologies curriculum. More recently, with iPads replacing notebooks we have enlisted the support of Winthrop Australia's professional learning coach. This has been a very successful program with teachers receiving weekly class support and full day professional learning in the effective use of iPads to enhance learning.

For further information about the SMAR Model and Bloom's Taxonomy, please refer to the following link: <https://www.schrockguide.net/samr.html>

From our research it has also become clear that our parents need support in the effective use of iPads and how to control the time and type of activity children are engaged at home. Workshops to support parents will start in 2020 and continue as need arises each year.

## STAGES of IMPLEMENTATION

### BYOD Program

In Term 3, 2020, after an extensive review, the BYOD Committee recommend to the School Board that we introduce a Bring Your Own Device (BYOD – iPad) program in 2021. Following this decision, the School Board met and endorse the school's commitment to introducing a BYOD – iPad program to Burrendah PS in 2021.

The Bring Your Own Device (**BYOD - iPad**) program is aimed at creating a 1:1 ratio for Year 4 – 6 students. This is based on the reliable life expectancy of an iPad and the reality that students will probably need a different device as they transition to high school. It also enables the school to reallocate funds so that Kindergarten to Year 3 students have access to shared iPads along with maintaining and replacing various peripheral digital devices and ensuring our infrastructure is up-to-date and reliable.

It is also important to note, that whilst iPads can have a prolong life span, their ability to run the latest OS (operating system) and associate apps diminishing after about 3 – 4 years. This is considered an imperative in a school environment where uniformity is critical in the efficient use of technology to enhance learning rather than impede it.

In terms of the transition to Willetton SHS, we acknowledge that their preferred device has recently changed to a Surface Pro. However, in our recent review we decided this device was too expensive (approx. \$1700) for the majority of parents. In addition to this, it would be impossible for the school to fill the gaps in the senior grades and the K – Year 3 program, if we were to maintain a single platform across all year levels.

Interestingly, from a functional viewpoint that the iPad has the ability to write on the screen (inking) and access MS One Note, which are the two tools that Willetton SHS considered important.

The school acknowledges the importance of keyboard skills and the functionality of using a touch sensitive pen. Given this, to reduce cost for parents and ensure equitable access, the school would commit to purchasing sets of these peripheral devices.

## **PURCHASING & SERVICING DEVICES**

### **Purchasing Process**

Students from Years 4 to 6 are encouraged to bring their own iPad to school providing it meets some specified requirements. These requirements ensure that the quality of the device enhances student learning rather than hinders it.

We have a partnership with Winthrop Australia which allows families to purchase specific devices at educational pricing and access technical support.

For further information about pricing and purchasing, please refer to the following link:

<https://sales.winaust.com.au/shop/burrendahps>

Winthrop Australia with Skye Card also offer a six-month interest free option for devices purchased through their portal.

Technical support is offered via online ticketing system whereby faults are recorded and then picked up at school or delivered to their premises at UWA.

Winthrop Australia also offer an extension of warranty via Apple Care (\$80) which extended the warranty from one year to two and includes two claims for accidental damage with a small excess (\$65).

### **iPad Recommendations**

Burrendah Primary School recommends an iPad (8th Gen) 10.2 WiFi 128GB. Note the 32 GB version is not capable of storing sufficient data over time or running interconnected multimodal programs at the same time. Nor do we support the iPad Mini, as the smaller screen size is not optimal for all apps in the classroom, and is not able to be used for NAPLAN Online. Devices with a SIM card or 3G/4G capabilities are not permitted as a security measure. However, these devices can be used, if the SIM card is removed whilst at school.

Current pricing for an iPad (8th Gen) 10.2 WiFi 128GB is \$570 (incl GST) and \$45 for STM Dux Duo cover, which adds up to \$615.

If you already have an iPad, it must have a minimum of iPad OS version 14 installed. Currently the iPads capable of running iPad OS are: iPad 5<sup>th</sup>, 6<sup>th</sup> & 7<sup>th</sup> Gen, iPad Air (2019) and iPad Air 2 (2014) along with iPad Pros (9.7" 2016 – 12.9" 2015-20).

### **Peripheral Devices – Keyboard, Pen & Headphone**

As mentioned we see a time and place when an external keyboard and/or pen is needed but also acknowledge the additional cost. Given this, we have decided to purchase external keyboards and pens so that all students have access to these devices when the need arises. In the case with headphones, we recommend a cheap pair of over-the-ear headphones, which allow students to control volume levels and block out external sounds.

For those parents who wish to use these optional peripheral devices at home, Winthrop Australia will also include a package which includes an iPad, keyboard attached to cover (Logitech - approx. \$187) and Apple Pencil (approx. \$120) or Logitech Crayon pen (approx. \$116).

It is also important to note that students will still be ample opportunity to use pen and paper. This is important because kinaesthetic learning (tactile) as well as multi-sensory (visual & auditory) techniques is part of how we learn.

## Cases

iPads may only be brought to Burrendah Primary School in a secure case. A strong case will minimise against breakage and other mishaps that may occur on the journey to and from school, and during class. From our experience the STM Dux Duo covers offer excellent protection from accidents. We also recommend that iPads are placed into a waterproof sleeve or jacket when traveling in students' school bags to prevent mishaps from drink bottles and lunches.

## IPAD SETUP MANAGEMENT

### Set Up

From the perspective of home use, to purchase apps and interact with content on the iPad, each iPad is required to be signed into an iTunes account. However, at school we will provide all apps through a Jamf's Mobile Device Management (MDM) system which automatically loads required apps onto student devices. This will ensure that all children have the correct app and version required for efficient lesson delivery.

### Apple – Parental Controls

Feedback from parents indicated that they were concerned about screen time at home. In response to this universal issue, Apple offer significant parental control of student's access to iPad apps, screen time, content and functions. These controls are offered through Family Sharing and Settings (see below for more details). In addition to this, Jamf offer a free online intuitive interface to restrict children's access to apps and other features.

### Apple - Family Sharing

Burrendah Primary School recommends setting up a Family Sharing account on their iPad or iPhone. This allows parents to attach a child's iTunes account to their own, which provides added protection for inadvertent app purchases or credit card use. When a child initiates a purchase (both paid and free apps), an alert is sent to the parent, who can review the download and approve or decline it on their own Apple device. All apps purchased through Family Sharing are then available for the whole family at no extra cost. In addition to this, there are other shared features, such as iCloud, Screen Time, Apple Music etc.

For further information about Family Sharing, please refer to the following link:

<https://www.apple.com/au/icloud/family-sharing/>

### Apple - Parental Controls – Settings

In addition to Family Sharing, parents can also go into the *Settings* menu on their child's iPad and fine tune restrictions even further. To do this, select *Settings*, tap *Content & Privacy Restrictions* (slide button to on - green). Then under the headings: *iTunes and Apps Store Purchases*, *Allow Apps*, *Content Restrictions*, *Privacy* and *Allow Changes* select *Allow* > and select *Allow or Don't Allow*.

### JAMF – Parent Controls

As mentioned above, we are using Jamf's Mobile Device Management (MDM) system to deploy and control the distribution of apps to all our devices across the school. The same company, which has an educational focus, has recently created a free Parent iOS App which further empowers parents to manage their children's school-issued devices. Through an intuitive interface you can restrict which apps children access on their devices, receive notifications when your child arrives at school and schedule homework time or bedtime to allow or restrict certain apps.

For further information about Jamf Parent, please refer to the following link:

<https://www.jamf.com/products/jamf-parent/>

## Apple Classroom

To guide student learning, share work and manage student devices in the classroom, teachers have access to the Apple Classroom app. This enables teachers to launch a specific app, website, or textbook page on any iPad in the classroom, share documents between teacher and students, or share student work on an interactive whiteboard.

## Care and Consideration

At Burrendah Primary School, using an iPad is a privilege and not a right. We believe that working in partnership with the home to teach our children to be good digital citizens is a vital part of forming well-rounded members of our community.

## iPad Usage Agreements

Before iPads are brought to school and added to the school network, students need to discuss and agree to two key documents.

The **ICT Acceptable Use Agreement** provides the conditions for use that the Department of Education stipulates before students can access the online services of Burrendah Primary School. This should be read carefully by parents and students.

The **Family Media Agreement** provides an opportunity for parents and their children to sit together and come to agreement on the purpose and use of the iPad at home. For many families, the BYOD iPad is the first device provided for their child, and establishing clear guidelines early is beneficial. Year 4 families will be given the opportunity to hold family discussions under the guidance of the school at the start of the school year.

## Care at School

Similar to the Family Media Agreement, students will conference with their classroom educators at the start of each year to agree on the purpose and use of the iPad in the classroom, via a **Classroom Media Agreement**.

As part of this agreement, following common commitments are made:

- When not in use, devices will be stored in a secure, locked cupboard in the classroom.
- Devices will not be available at recess or lunchtime unless they are used under direct teacher supervision.
- All devices will be password protected and clearly labelled with the child's name.
- Charging facilities will not be provided at school – students are required to bring a fully-charged iPad to school each day.
- Students will need to agree to join the MDM - Jamf platform so access to social media apps such as FaceTime and iMessage is switched off to minimise distractions.

## Digital Citizenship

Research shows that establishing honest and open lines of communication is the most effective way of helping children identify and develop strong cyber-safety strategies. While at school, student devices access the network using the Department's stringent internet filtering, email and online platform systems.

At home, families should consider the use of an appropriate internet filtering system for home, such as Family Zone which has been recommended by the Office of the Children's eSafety Commission. Families are encouraged to do their research and choose an app or method that works for their family.