Bring Your Own Technology Procedures
1. **Scope (audience and applicability)**

These procedures provide an educational rationale and information to support schools wishing to implement a Bring Your Own Technology (BYOT) programme.

2. **Purpose**

The purpose of these procedures is to support schools, working with students and parents, to implement a programme so students can bring their own technology devices to school for learning if they chose to do so.

3. **Background**

There are many reasons to allow students to bring their own devices to school from home to assist in their learning.

There is a considerable global push in the BYOT direction so that our young people are well-prepared to be successful learners in an ever increasing technologically advanced world. Key to such success is the ability to use technology responsibly to gather, evaluate, construct and share knowledge and digital media in the 21st Century.

These procedures aim to support schools to take advantage of the powerful learning possibilities offered by a BYOT programme while taking into account issues such as:

- current research on national/international best practice
- increasing reliance on technology
- need for anytime and anywhere access by students to devices to support their learning
- clear definition of system, school and home responsibilities

Implementing a BYOT programme is a school-based decision that must be undertaken in consultation with and supported by staff and the school community. Schools should view BYOT as an approach that enhances and extends opportunities for students to access and use their own devices for learning. The BYOT programme cannot be used as a replacement for the school providing ICT devices for student use.

Any BYOT programme has strong equity implications. This includes ensuring that students are not left behind and that parents are not confronted with unrealistic expectations as it is acknowledged that not all parents can or want to send their child to school with a personal technology device. BYOT schools will need to continue to plan for a learning environment that will contain a mix of school provided and student owned devices.

4. **Definitions**

**Bring Your Own Technology (BYOT) device:** refers to any electronic device such as, but not limited to, mobile phones, music and video players, still and video cameras, voice recorders, instant messaging services, GPS systems, handheld games systems, smartphones, app-based tablets, netbooks, ultrabooks, laptops, tablet PC or computers.
**Information and Communication Technology:** refers to technology devices provided by schools.

**Levy/levies:** a financial contribution by parents relating to costs associated with each student’s education programme, e.g. books and classroom materials.

**Parent/s:** includes guardians/s or other person/s having the care and control of a child.

**Platform:** refers to an underlying computer system on which application programmes can run e.g. virtual learning environment (VLE) and cloud services.

**School/s:** includes early years settings, schools and senior secondary schools (colleges).

**School Association:** includes parents, students, staff and members of the broader community.

**School Association Committee:** is the elected representative group made up of members of the School Association.

5. **Procedure Details**

These procedures should be read in conjunction with the ICT in Schools Policy (under development), the Procedures for the Use of Cloud Computing and Data Storage (under development) the Social Media Policy and the Use of DoE Data and Information Procedure.

**Implementation Processes**

- Prior to beginning any action or implementation, schools must consider their vision and purpose for pursuing a BYOT programme. There must be a strong understanding as to how BYOT will support learning.

- It is critical that schools consider teacher and staff professional learning requirements and capacity to leverage technology for teaching and learning.

- BYOT is a learning tool and is designed to augment and enhance student access to devices for digital learning. Schools must ensure appropriate information technology provision outside of any BYOT programme.

- A key step in planning a BYOT programme is to engage the school community. A BYOT programme needs full support from teachers, students and parents. Schools must discuss how they will manage their ICT programme delivery with their parent community and seek support of the School Association. The early engagement of the School Association is important step in planning for the BYOT programme.

- Schools need to consider which communication methods (i.e. newsletters, parent information nights etc.) will be required to ensure the school community understands and supports a proposed BYOT programme.

- It is important that information regarding a BYOT programme is communicated to parents as soon as possible; preferably well before the start of the school year.

- Schools should work with their School Association to develop clear documentation to support and govern the acceptable use of BYOT devices in the school environment – this must be in line with this procedure and related documents.

- Wi-Fi access to the DoE_Student wireless network is provided throughout all DoE sites including schools.
• Schools should ensure that the DoE_Student wireless network is configured and has enough coverage and access points to allow WiFi enabled BYOT devices to connect.

• The DoE_Student wireless network separates all traffic from the rest of the department’s network. This means that BYOT devices cannot access school drives or printers and can only access digital resources as if the student is located at home.

• When accessing resources on the Internet all traffic goes through DoE’s web filtering software which filters inappropriate content.

• Appropriate virus protection should be considered by all users who connect their device to the DoE_Student wireless network.

• Other aspects that require consideration before schools implement a BYOT programme should include:
  o Infrastructure needs — necessary power points, and number and location of wireless access points.
  o Suitability of physical learning spaces.
  o Day-to-day management of student devices — storage, security, charging, support and safety.
  o Student readiness to follow agreed BYOT procedures (refer to Student expectations and acceptable use).
  o Equity issues

Access

• Schools may, in conjunction with their school community, supply Attachment B – BYOT Device Requirements Checklist to parents, which a parent could then refer to if purchasing a device for their child from normal computer retail outlets, but no particular device is to be mandated for BYOT devices.

• A critical consideration for all parties is the capability of the device to support teaching and learning. The following graphic provides examples of what a device can be used for.
This graphic provides a description of common platforms and their likely capabilities.

- Planning must be undertaken to determine the software requirements for students and the opportunities for personalised learning. In addition to the device software or applications, schools need to consider software solutions that support access to existing learning, teaching and assessment platforms both within and outside of the school through BYOT e.g. Fronter, SharePoint or DoE / school recommended “cloud services”.

- Schools should consider and evaluate their position on the following:
  - Internet access,
  - Global Positioning System (GPS) functionality,
  - Device password lock,
  - File sharing and backup options.

Curriculum and teaching
- A key advantage of BYOT is that students will be using a familiar device for learning at school as at home that is self-supported or with the help of a parent or family member.

- Increased access and use of technology for learning can support and engage students through:
  - Providing anywhere, anytime learning
  - Supporting teacher innovation and capacity building
  - Supporting the development of 21st Century skills and capabilities
  - Connecting parents with their child’s learning

Please refer to the online copy of this document (TASED-4-6235), located on the Tasmanian Department of Education’s website to ensure this version is the most recent (Version 2.0).
Personalising learning to meet the needs of all students, including the gifted and talented and students with high needs.

- Technology alone will not improve learning; it must be combined with quality learning design, and skilful teaching. Software, tools and resources to suit pedagogical practices requires careful consideration by schools.

- A BYOT programme must support, facilitate, increase and accelerate learning – BYOT device functionality should not drive educational planning.

- BYOT provides the opportunity to enhance learning by freeing learners from the restrictions of a typical classroom; however schools should also recognise and consider the limitations of smaller or less powerful mobile devices as learning instruments. For example, more powerful devices are required for students to become sophisticated users of technology in areas such as Computer Aided Design (CAD), digital art, video production, audio production, web design and computer programming.

- A BYOT programme requires significant curriculum support and design in order to take full advantage of the technology. (See below for support options.)

- Schools and teachers must plan for the effective use of BYOT in the classroom and other learning environments. Planning should be informed by the relevant curriculum document (i.e. The ICT General Capability of the Australian Curriculum, the Early Years Learning Framework; individual Australian Curriculum subject documents, especially the Australian Curriculum: Technologies, and appropriate TQA and VET courses).

Additional curriculum-based support for schools and teachers engaging in a BYOT programme is available in the form of:

- Professional Learning Institute Programmes
  - Leading a Digital School
  - 21st Century Learning Design

- Curriculum Services
  - eLearning Training and Support
  - Curriculum Support Centre (Australian Curriculum)
  - DoE Frontier virtual learning environment

- Marketing Services
  - Social Media
  - Statutory and creative commons copyright

**Cost, levies and procurement**

- Schools must ensure that their BYOT model conforms to the requirements of the [School Levies and Charges Policy](#).

- Schools should not include the cost of purchasing student owned devices or software for them within general levies.
• A co-contribution model, where the school and parents share the cost of a device, does not conform to the DoE School Levy Policy.

• Schools must be clear to students and parents that those who opt not to participate in BYOT will still have access to school owned ICT, although these may be restricted to use within the school only and not taken home (individual school decision).

• If school owned devices are made available to students as a free loan unit, then all procurement of these devices must follow existing government procurement procedures and be purchased via existing government purchasing contracts.

• Schools must not recommend a particular device, service or supplier as this is a parent decision/choice.

• Schools should provide the 'Bring Your Own Technology Device Checklist' handout (last page of these BYOT Procedures) to students and parents to assist them with their device selection.

Security and storage
• Schools must ensure that any BYOT device connects only to the DoE_Student wireless network.

• Schools may have to consider the implications of access by students to networks other than the DoE which may not apply the same level of security / web filtering.

• Schools must consider how devices will be securely stored when not in use and consider any risk for personal property brought onto school premises. The department does not accept liability for loss or damage to private property or personal effects used or stored in buildings owned or used by the department. This should be clearly communicated to the students and parents as part of any school BYOT policy.

• In cases of malicious damage or theft of another student’s device, existing school processes for damage to school or another student’s property apply.

• Consideration must be given to the safe and secure sharing and storage of data. Refer to the Procedures for the use of Cloud Computing and Data Storage (under development) if using ‘cloud’ services.

Student expectations and acceptable use
• BYOT means students bring their own devices of choice to school for educational purposes. In the classroom, students should use devices responsibly, and only with the permission and direction of the teacher.

• Schools must make it clear to students and parents what, if any, battery charging facilities will be available at the school. It should be recommended that charging is to be done at home unless there will be some spaces for students to charge BYOT devices at school.
• Schools must ensure that ICT User Agreements (Primary and Secondary) include BYOT statements, and are signed by both the parent and student who have been made aware of consequences resulting from the inappropriate use of BYOT devices.

• Students must be aware of the importance of courtesy, consideration and respect for others whenever they are using a BYOT (or any) device.

• Schools must consider how their BYOT approach applies in wider contexts including school excursions, camps and extra-curricular activities. The discretion of these considerations is for the school to decide whilst taking into account the limitation on the available network access technology.

• Schools must implement a Cyber Education Programme for students and the wider school community, e.g. https://www.education.tas.gov.au/Students/schools-colleges/Pages/Cyber-Safety.aspx

Departmental ICT support
• DoE purchased (and therefore managed) devices will have full support of local ICT staff. For parent/student purchased BYOT devices, DoE IT support staff will provide guidance with wireless connection technical issues, such as to ensure that the student’s device connects to the DoE_Student wireless network only. All configuration or software changes to the BYOT device need to be undertaken by the student.

• The following general information will assist users in accessing the wireless network.

<table>
<thead>
<tr>
<th>Wireless network (SSID)</th>
<th>DoE_Student</th>
</tr>
</thead>
<tbody>
<tr>
<td>Username</td>
<td>Your Education domain username eg firstname.lastname.00</td>
</tr>
<tr>
<td>Password</td>
<td>The password you use to log in to computers, email, etc.</td>
</tr>
<tr>
<td>Wireless Security</td>
<td>WPA2 Enterprise</td>
</tr>
<tr>
<td>Authentication</td>
<td>Protected EAP (PEAP)</td>
</tr>
<tr>
<td>Inner authentication</td>
<td>MSCHAPv2</td>
</tr>
<tr>
<td>CA certificate</td>
<td>None</td>
</tr>
</tbody>
</table>

• DoE IT support staff will not undertake any software installs or configurations or any mechanical repairs of parent/student owned BYOT devices. All students are responsible for the safe keeping of their own or loan devices, and any software installs, repairs or technical faults will need to be addressed under the terms of the warranty. For student/parent owned BYOT this means that parents are responsible for having devices repaired.

6. Roles and Responsibilities

Meaning of "must", "is to" and "may"

(a) the word "must" is to be construed as being mandatory; and
(b) the words "is to" and "are to" are to be construed as being directory; and
(c) the word "may" is to be construed as being discretionary or enabling, as the context requires.
| General Managers and Principal Network Leaders are responsible for: | • Ensuring schools are equitable in their management strategies of BYOT i.e. disadvantaged students and families are not confronted with unrealistic expectations.  
• Ensuring that principals are familiar with the procedures and associated documents in this area and adhere to them.  
• Ensuring that schools plan for the use of BYOT in the classroom to support learning. |
| --- | --- |
| Principals are responsible for: | • Ensuring engagement with parents, through their School Association, prior to implementation of BYOT.  
• Developing school based procedures to govern the use of BYOT devices at school. Note: the Acceptable Use Agreement that the school asks students/parents to sign at the start of the year can be used.  
• Including BYOT in educational planning and teacher and staff professional learning activities.  
• Ensuring the school provides the IT infrastructure including wireless access points that supports the student/parent privately owned BYOT device connecting to the DoE Wi-Fi network.  
• Ensuring the school has a Cyber Safety programme. |
| Teachers are responsible for: | • Providing guidance for use of ICT within the classroom and associated learning environments, including ensuring students understand and follow the procedures and related documents.  
• Developing curriculum and learning activities that use technology to build knowledge, understandings and produce outcomes that are not possible or practical without the use of technology.  
• Ensuring the technology available to all students is considered when developing curriculum and learning activities.  
• Planning for the use of BYOT in the classroom through the Australian Curriculum ICT General Capability and the Australian Curriculum Learning Areas.  
• Ensuring Cyber Safety is a key component of ICT based teaching and learning. |
| Director ITS is responsible for: | • Ensuring appropriate levels of information technology support is provided by ITS. |
| DoE IT support is responsible for: | • Providing technical support for DoE purchased (and therefore managed) devices only.  
• Providing assistance with wireless connection technical issues, such as to ensure that the student’s device connects to the DoE Wi-Fi network, for parent/student purchased BYOT devices. |
| Parents are responsible for: | • Accepting that the primary use of BYOT while at school is for educational purposes.  
• Understanding and signing the school’s ICT Acceptable Use agreement/guidelines at least once per year.  
• Ensuring appropriate use of devices and being ‘cyber safe’ is discussed regularly with their child.  
• Ensuring their child understands their responsibilities when accessing and using the department’s ICT facilities and are aware of and adhere to, the ICT Acceptable Use requirements.  
• Being aware that approval to connect any wholly owned private device to the school network is at the discretion of the Principal. |
| Students are responsible for: | • Demonstrating appropriate and lawful behaviour when accessing and using the school ICT facilities and their own BYOT devices.  
• Maintaining school user name and password security.  
• Maintaining BYOT device password security.  
• Acknowledging and signing the school’s ICT Acceptable Use agreement/guidelines every year.  
• Following requirements in any department Social Media policies, procedures and guidelines.  
• Ensuring that any electronic devices carried by them onto school premises are stored in a safe place during school hours, in line with any specific arrangements made by the school. |
7. Associated Documents and Materials

Attachment A: Evolutionary stages and key indicators in digital normalisation.
Attachment B: Device Information Sheet

Related Documents
The following documents are available from www.education.tas.gov.au (Search for the Doc ID)

- Accountability Policy (TASED-4-3000)
- Allocation and Acceptable Use of Mobile Devices
- Bring Your Own Technology Policy (DOC ID: TASED-4-6234)
- Child and Student Learning Policy (DOC ID: TASED-4-1395)
- Creative Commons and Statutory Copyright information.
  (https://www.education.tas.gov.au/intranet/CSD/Marketing-Services/Pages/Copyright.aspx) – Staff only
- Curriculum in Tasmanian Government Schools Policy (DOC ID: TASED-4-1145)
- Cyber Safety (https://www.education.tas.gov.au/Students/schools-colleges/Pages/Cyber-Safety.aspx)
- ICT Policy (Under development)
- Learner Wellbeing and Behaviour Policy (TASED-4-1734)
- Procedures for the Use of Cloud Computing and Data Storage (under development)
- Professional Learning Policy (DOC ID: TASED-4-1191)
- School Levy and Charges Policy (Doc ID: TASED-4-1252)
- Social Media Policy (TASED-4-4792), Procedures (TASED-4-4793) and Guidelines (TASED-4-4791)
- Use of DoE Data and Information Procedure (TASED-4-3867 – Staff Only)
- Web Filtering Policy (TASED-4-1878)

References:
http://byot.me/ - An international forum for all schools seeking to make the best use of BYOT

Authorised by: Liz Banks
Position of authorising person: Deputy Secretary Early Years and Schools
Date authorised: May 2015
Developed by: Strategic Policy and Planning/ITS/Curriculum Services
Date of last review: -
Date for next review: May 2017
This document replaces: -
<table>
<thead>
<tr>
<th>Stage</th>
<th>Vision</th>
<th>Insular mindset</th>
<th>digital use in teaching</th>
<th>digital use by pupils</th>
<th>control of ICT equipment</th>
<th>ICT equipment in use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional paper</td>
<td>Educational agenda strongly shaped by external tests.</td>
<td>Teachers unilaterally control the teaching. Highly insular in outlook, segmented silo-like operation with limited links between departments/year groups.</td>
<td>Paper, pen and the traditional teaching board is the dominant instructional technology. Efforts by a few early adopter teachers to integrate use of the digital.</td>
<td>Use of technology by pupils is the exception except in a few technology-oriented subjects or with early-adopter teachers.</td>
<td>Control of the digital by ICT experts in school. Adoption of industry standard operating system, technology, and applications software.</td>
<td>The school network is mainly for admin and resources. Only some teachers have laptops.</td>
</tr>
<tr>
<td>Early digital take-off</td>
<td>Loose links between school's educational agenda and deployment of the technology.</td>
<td>Focus still insular, with teachers starting to use digital approaches within the school walls.</td>
<td>Leadership expect that all staff will use digital in teaching and admin. Small but critical mass of teachers using the digital in everyday teaching.</td>
<td>Use of technology by pupils controlled by teachers, at times when teachers decide are appropriate.</td>
<td>ICT team chooses, configures, and deploys all hardware and software. Access to the Net tightly controlled and filtered. All other technology banned.</td>
<td>Suite of digital technology in every teaching room for whole of class presentation, that enables teachers to transition from paper to digital teaching.</td>
</tr>
<tr>
<td>Digital take-off</td>
<td>Planned links between school's educational agenda and deployment of the technology.</td>
<td>Insular mindset still dominant, but growing awareness of extended learning out of class and change in practice by teachers.</td>
<td>All or nearly all teachers making some use of digital in their everyday teaching.</td>
<td>ICT team chooses, configures, and deploys all hardware and software. Access to the Net tightly controlled and filtered. All other technology banned.</td>
<td>ICT team chooses, configures, and deploys all hardware and software. Access to the Net tightly controlled and filtered. All other technology banned.</td>
<td>Suite of digital technology in every teaching room for whole of class presentation, that enables teachers to transition from paper to digital teaching.</td>
</tr>
<tr>
<td>Early people networked</td>
<td>Leadership promote the provision of a holistic, networked, ever more collaborative education that transcends the physical school walls.</td>
<td>Teachers starting to adopt a people-networking mindset, stimulating pupil collaboration and starting to share ideas with colleagues.</td>
<td>Teachers start to recognize the educational opportunities of online collaboration. School seeks greater use of online and networked teaching.</td>
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<tr>
<td>people networked</td>
<td>Leadership committed to a holistic 24/7/365 education, with tightening links between the schools vision and its use of technology.</td>
<td>Staff adopt a people-networking mindset when considering how to structure the curriculum, organise learning and use of technology.</td>
<td>Emergence of a networked learning community that increasingly integrates the in and out of school student learning.</td>
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<tr>
<td>Early digital</td>
<td>Teachers and pupils develop understanding of a different approach, to increasingly independent but collaborative learning.</td>
<td>The networked mindset has led to some radical innovations in teaching and learning. Teachers appreciate that this is growing effectiveness.</td>
<td>Digital use as a natural part of all school operations by all within the school's community, with teaching approaches starting to change in response.</td>
<td>Digital use as a natural part of all school operations by all within the school's community, with teaching approaches starting to change in response.</td>
<td>Digital use as a natural part of all school operations by all within the school's community, with teaching approaches starting to change in response.</td>
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</tr>
<tr>
<td>normalisation</td>
<td>The school responds flexibly to creative innovations led by teachers and pupils with the agenda shaped by desire to learn.</td>
<td>The individuals in the school are empowered as learners with pupils leading much learning and helping less mature pupils.</td>
<td>Teaching approaches require use of the digital environment to realise the increased effectiveness teachers expect in their work.</td>
<td>Student use of their own technology in classes is normalised. Not using technology is consciously decided if appropriate.</td>
<td>Student use of their own technology in classes is normalised. Not using technology is consciously decided if appropriate.</td>
<td>Student use of their own technology in classes is normalised. Not using technology is consciously decided if appropriate.</td>
</tr>
<tr>
<td>Full digital</td>
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</table>
BRING YOUR OWN TECHNOLOGY

Device Checklist

OPERATING SYSTEM - Windows 8.1/ iOS 8
To ensure the latest programs and software are compatible, we recommend the current (or previous) version of any operating system. E.g., Windows 8.1 for laptops or iOS 8 for iPads.

WIRELESS CONNECTIVITY
Wireless connectivity is a vital feature for BYO technology items in schools. Your device should support 2.4GHz and/or 5GHz band wireless.

HARDWARE FEATURES :: CAMERA & MICROPHONE
These are necessary to ensure students can participate in 21st century learning activities. A stylus or keyboard may also be useful.

REASONABLE SCREEN SIZE
for ease of use

WEIGHT
Is the device light enough to carry each day?

ACCESSORIES
Carry case: a carry case or skin is essential for protecting the device and can provide ergonomic advantages. Insurance: devices can become lost or be broken easily at school. Make sure your insurance policy covers these eventualities. Warranty: make sure you consider purchasing extra warranty to reduce future repair costs as these devices will be used extensively.

MEMORY & RAM
32GB Storage :: 2GB RAM
To be able to store and process data effectively, these minimum specifications are recommended.

DURABILITY
Tough and sturdy outer casing and strong keys and inputs.

BATTERY LIFE
Minimum 5 hours