to sustain the proven acceptance of the James Nash 1:1 mobile devices policy
“We recognise the importance of 1:1 as a vehicle to connect our students to contemporary education resources and techniques that inspire learning and educational excellence for all learners.”

James Nash SHS BYOx Guiding Coalition, 2014
In the JNSHS context this means providing hybrid learning experiences; an appropriate balance of ICT based learning

AND

a variety of other pedagogical strategies.
What do we know about our world and education?
Typically, students at James Nash SHS were born in 1998 or later ....

began in March 1998

All our students, present and future, have always existed in a technological world of information acquisition and sharing.
“All current students at James Nash have known this as a school of 1:1 mobile eLearning Senior Students”
Australians of all age groups continue to spend the majority of their screen time with the in-home TV set. As new screen technologies enter the home, they are being used to complement TV viewing – whether on the sofa or, thanks to the mobility of these devices, other parts of the home. Changing viewer behaviour is evident with homes acquiring internet-enabled TV sets, people using tablets in place of desktop and laptop computers, and smartphones in more pockets than ever. Currently, 27 percent of Australian homes have each of the four screen types: TV, PC, tablet and mobile phone, up from 16 percent a year ago.

The most significant increases for technology in the home that allow for the viewing of video have been with mobile devices. Smartphone uptake has gone up by 13 percentage points (based on people 16+) since Q1 2012, while tablet penetration has more than doubled: close to a third (31%) of Australians now have a tablet in the home, with time spent watching online video on tablets for online Australians currently at 50 minutes per month (Nielsen Australian Connected Consumers Report).
HP Pro Tablet 10 EE

Tough enough for school

Enable 1:1 learning and personalized instruction with the HP Pro Tablet 10 EE, a 10” diagonal Windows tablet toughened for the school day.

Shop now  Learn more
Important Developments in Technology for K-12 Education

**Time-to-Adoption Horizon: One Year or Less**
- BYOD
- Cloud Computing

**Time-to-Adoption Horizon: Two to Three Years**
- Games and Gamification
- Learning Analytics

**Time-to-Adoption Horizon: Four to Five Years**
- The Internet of Things
- Wearable Technology
Welcome to Go Digi!
We're here to help you realise your online potential.

Which one are you?

Learner
I would like to learn some online skills

Mentor
I want to help others learn online skills

Partner
I would like to get my organisation involved

Start learning
Start helping
Get networking
What do we know about our teenagers at this school?
What do we know about 1:1 laptops for learning and student engagement with learning?
Changes in student’s attitudes and work habits survey data from Maine, 2004 with over 12 000 returned surveys:

‘I would rather use my laptop’ 80%
‘Laptops help me be better organised’ 75%
‘Laptops improve the quality of my work’ 70%
‘I do more work when I use my laptop’ 70%
‘I am more likely to edit my work with a laptop’ 80%
‘I am more involved in school with a laptop’ 70%
‘Laptops make school more interesting’ 70%
“Students spent more time giving presentations’ 74%  
‘Students are more interested in class’ 84%  
‘Students help each other more’ 84%  
‘Students take more initiative outside of class time’ 65%  
‘Students writing quality is better’ 57%  
‘Students overall quality of work is better’ 65%  
‘Students get more involved in in-depth research’ 85%  
‘Students work harder at their assignments’ 79%  
‘Students revise their work more’ 78%
What do we know about 1:1 laptops for learning 21st Century work skills?

1. Creativity
2. Critical Thinking
3. Collaboration
4. Reflection
Smart Classrooms, Education Queensland 2015:

Students who have their own laptop computers have been found to take greater pride and ownership over the knowledge they create, with a flow-on to more flexible forms of schooling.
Overwhelmingly, studies of laptop programs indicate many positive effects for students. Reports indicate that students:

- have more fun
- are more enthusiastic
- have increased engagement in learning
- are more interested in learning
- are more self-directed in learning
- have greater self confidence and self esteem
- use computers more often for learning
- focus on improving performance
- have greater ICT skills
- increase their research skills
- improve problem solving and critical thinking skills
- write more extensively with improved quality
- have increased access to information
- can present information more effectively
- spend more time working collaboratively
- collaborate better and are more willing to share their work and help each other
- are engaged in more project-based work
- enjoy learning actively.
What do we know about 1:1 laptops for learning and student academic improvement?
Does ICT Access Improve Performance?

OECD Study Shows Technology use is connected to performance

**Frequency of use of computers at home and student performance on PISA science scale**

- ▲ Frequent use
- ● Moderate use
- □ Rare or no use

Countries: Finland, Japan, Korea, Sweden, Canada, Macao, Ireland, New Zealand, Lichtenstein, Slovenia, Russian, Poland, Latvia, Germany, Switzerland, Hungary, Austria, Australia, Czechia, Croatia, Belgium, Greece, Slovak, Lithuania, Denmark, Spain, Iceland, Norway, Italy, Portugal, Turkey, Chile, Uruguay, Jordan, Serbia, Bulgaria, Thailand, Colombia, Qatar
The report found that the curriculum, which included both instruction time on computers and in-person, improved high school performance by 8 percentile points.
Students who used school-issued laptop computers at school and home perform better in their HSC science exams than those not given the computers, research from the University of Sydney has shown.

"While improvements are small to medium they are statistically significant, particularly in the context of highly competitive HSC exams where a margin of a few marks can affect a student's future at university or in the job market," said Simon Crook, a PhD candidate in the physics education research group at the University of Sydney and lead author of an article recently published in the International Journal of Science Education.

"Most importantly our research suggests the best improvements came when the computers were used to challenge and extend students’ analytical and higher-order thinking skills.

While there is widespread research on the impact of using laptops on students' academic achievement, especially in high-stakes exams, there is a lack of research on their influence on academic achievement, especially in high-stakes exams.

The study capitalised on a unique natural experiment in which only half of all students who took the HSC science exams in 2008 received laptops from their schools. In late 2011, when these students took their HSC examinations half of them had been schooled with their own laptops for most of their time at school, while half had not.

This unique situation was created by the staged roll-out of the campaign, Revolution, in which students were given their own laptops to use at home.

The research looked at the results of 967 science students from 12 high schools in Sydney, Illawarra and Hunter region, with half of them using laptop computers at school and home. The rest did not.

Effect size measures the improvement in the students' performance following use of laptop computers. In this study the improvement was largest in physics - almost 30% for reducing class sizes, as found in other research. Applied to HSC exams this would see a possible gain of 3.5 marks for physics.

"Our analysis shows improved exam performance was not due to how much students used their computers but what they did with them," said Simon Crook.
What do we know about our school community perspective on 1:1 laptops for learning?
School Opinion Surveys

• Enabling learners
  - 94% students agree that they are encouraged to use ICT at school for learning
  - 96% students agree that they use ICT at school for learning

• Developing professionals
  - 97% staff agree that they have the required skills to use the necessary ICT to do their job at this school
Contextualising discussion point (i) – *The school is committed to a 1:1 learning environment in senior secondary.*

Contextualising discussion point (ii) – *The school is committed to a 1:1 learning environment in junior secondary.*

Discussion point 1 – *The school requires students to bring a single, prescribed device*

Discussion point 2 – *The school requires students to bring a single prescribed device and students can choose to bring another device*

Discussion point 3 – *The school requires students to bring one device selected from a narrow range of specified devices*

Discussion point 4 – *The school declares a set of minimum specifications for the device. The school requires students to bring one device that meets or exceeds these minimum specifications.*

Discussion point 5 – *The school makes no specific device recommendations. The school requires students to bring any device that meets curriculum and learner needs.*

Discussion point 6a – *The school recommends a BYOx program in years 7-9.*
Discussion point 6b – *The school recommends a BYOx program in years 7-9 Digi classes.*
Discussion point 6c – *The school recommends a BYOx program in years 7-9 Extension classes.*

Discussion point 7a – *The school recommends that the SRHS be increased to cover proportionate costs relating to the school network infrastructure, maintenance of effort, device connectivity, data consumption and software access.*

Discussion point 7b – *The school recommends that the SRHS be increased to cover proportionate costs relating to the school network infrastructure, maintenance of effort, device connectivity, data consumption and software access PLUS SRHS to be increased to cover school supplied device. Parents pay cost over 3 years.*
Contextualising discussion point (i) – *The school is committed to a 1:1 learning environment in senior secondary.*

- Availability or access is advantageous
- Learners are used to that environment as is current practice
- Reliability of knowing that you have it (resource)
Discussion point 1 – The school requires students to bring a single, prescribed device

Students, teachers
- too prescriptive
- not equitable for differentiated learning
- Familiar
- Streamlined management

Parents

Techs
What device do we choose?

‘It is really not about the laptops. It’s about what the 1:1 laptops enable in terms of new ways of teaching and learning.’

(Dunleavy, Dextert & Heinecket, 2007)
JNSHS BYOd Advice

Device minimum specifications for students in general studies:
Operating System: Windows 7 or 8
Processor: Intel Core i3  1.7 GHz  64-bit capable
Installed Memory (RAM):  4GB Memory
11" screen
Keyboard and mouse
160GB HDD

Device minimum specifications for students in multimedia or graphic studies:
Operating System: Windows 7 or 8
Processor: Intel Core i5  1.60GHz  64-bit capable
Installed Memory (RAM):  8GB Memory
11” screen although we recommend 15” screen or larger
Third party graphics card
Keyboard and mouse
320GB Hard Drive
Why not continue the 2011-2015 version of the laptop program?
National Secondary Schools Computer Fund

The NSSCF accounts for a large majority of DER funding, and its implementation was given first priority among the components of the DER program. The objective of the NSSCF is to achieve a computer to student ratio of 1:1 for all Australian students in Years 9 to 12 by 31 December 2011. Under the DER program, the Government has also committed funding to sustain the 1:1 ratio through to 2013–14.

NSSCF funding is to be used by schools, or education authorities on their behalf, to provide for new information and communications technology (ICT) equipment for secondary schools with students in Years 9 to 12.

(Australian National Audit Office, 2015)
Our planning has considered:

**Learning**
Focus on learning needs of students

**Busy Lifestyles**
Not all families know how or have time to organise a laptop.

**Our Village**
Engaged local supplier and service providers

**Collective Knowledge**
Our staff of 150 have many skills and much advice to share
To support our community in the transition to BYOd, the school will deliver ...
Expo: May 2
Tech Advice

*Face-to-face support*
- Help sheets
- Software tutorials

*Online support*
- Help sheets
Software/Online Subscriptions

BlackBoard (eLearn)
Microsoft Office 365 (multiple devices)
Norton Security anti-virus (reduced cost, one device)
Adobe Creative Suite
BrainPOP
Atomic Learning
Online Purchase via School Website
Device Security @School
Laptop lockers
Antivirus software from EQ

The school advises home to supply
Insurance
Protective cases
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is a Chromebook?</td>
<td>A device that meets the school's best advice for minimum specifications will allow students to perform the learning activities and tasks set at James Nash SHS.</td>
</tr>
<tr>
<td>Would I be disadvantaged if I only get a device with minimum specs?</td>
<td>A device that meets the school's best advice for minimum specifications will allow students to perform the learning activities and tasks. While there is no school based advantage to performance for home based interests and activities.</td>
</tr>
<tr>
<td>Would I be disadvantaged if I only get a recommended device (with a boost, if possible)?</td>
<td>A choice of school endorsed devices that meet the minimum specifications will be available for parents to purchase via an online portal. More details will be made available following the selection process.</td>
</tr>
<tr>
<td>Which manufacturer/wholesaler/retailer is exclusively providing the recommended device (if a choice of devices)?</td>
<td>Specific vendor information will be available at the JNSHS ICT Expo on May 2, 2018. Under Queensland Government law, it is not possible for the school to purchase devices to families.</td>
</tr>
</tbody>
</table>
START WHERE YOU ARE.
USE WHAT YOU HAVE.
DO WHAT YOU CAN.
Rather than full forum Q&A, please contribute to the school’s FAQ list.

Email: kswif9@eq.edu.au