Technology Committee

Review of Proposed Activity for 2016.

2016 TECHNOLOGY COMMITTEE HEAD

MS Kate Farrow and Mr Branko Goykovic have taken over the technology role from Mr. Peter Dawes due to his retirement. The school community will miss Peter Dawes for his huge commitment to the students and for a steady hand on the tiller for a number of years. Mr Dawes has been very generous with his time and opinions to help develop some of the ideas in this document.

BYOD

The school position was that whilst not mandating a particular device, parents were encouraged to provide their child with a device that met the broad guidelines provided.

http://www.nbscmanlys-h.schools.nsw.edu.au/documents/60109282/60116704/BYODchecklist.pdf

In practice there has been no formal audit done to understand the penetration of BYOD computers within the student community. Anecdotal feedback puts the availability of the computers

Current year 11 – 100% DER

Current Year 10-   Anecdotal feedback > 70%

Current Year 9 -   Anecdotal Feedback >60 %

Current year 7/8 – 60-70%

If the computers are to be used more effectively than as note taking instruments – the availability of computers should be a 100%. Teachers can then develop learning programs that take advantage of the possibilities that the tools afford.

Suggested Action Plan
- A target to obtain 100% BYOD by mid-2016 should be adopted.
- Survey of Computers in school – A survey can be conducted through Survey Monkey or other tool. the survey could be run by a SRC/Student group / P&C / School Administration.
- Suitable bank of computers are held at the school to ensure computer redundancy as well as provide equitable access to all students. Parents would have to apply for such loan computers.
- Schools technology Committee should be kept closely advised of decisions and progress towards target.
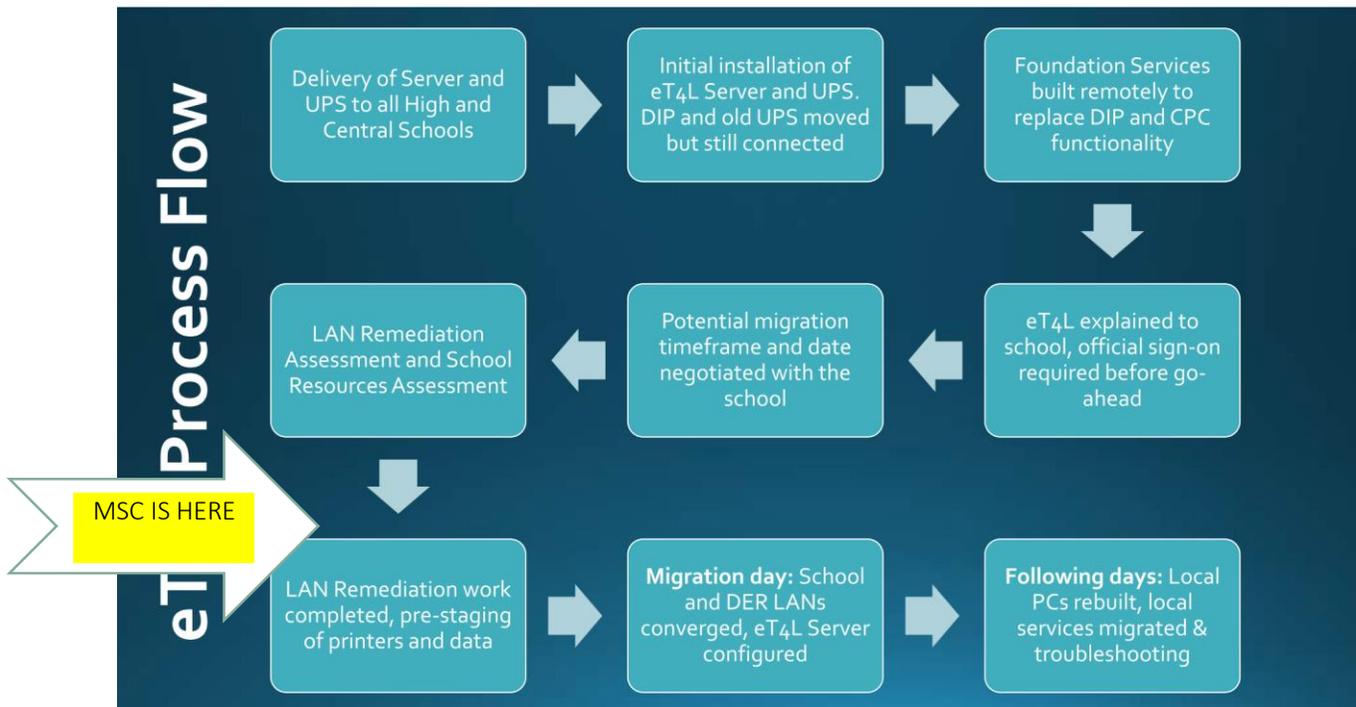
- Harvesting of any DER laptops from the current year 12 cohort who do not want to take them would assist in building a school buffer stock.

NETWORK

The school is moving towards eT4L installation. Chris Ashton reported that inventory and deployment of hardware on the network was being mapped with a programme called - Spiceworks – though he expected the DEC ICT surveying the network for the cut over to the eT4L installation would provide enough information for the whole network to be thoroughly documented.

eT4L will deliver:
- A new server to replace schools CPC and DER-DIP server and an uninterruptable power supply
- A Check of the school's Local Area Network with standard remediation where required. This may also include a power upgrade for the CD cabinet.
- An upgrade of all eligible computers to Windows 7 64 bit

The reference document can be found at

http://sts.sydneyr.det.nsw.edu.au/files/2014/eT4LSecondary/eT4LSecondary-briefingsession.pdf

The school also has a secondary network that currently manages the VOIP telephone system. It is intended to continue with this network as this could be configured to provide some emergency backup ability.

Wireless Network capacity is as yet not an issue. It appears that the currently available bandwidth is not being utilized however a close eye must be kept on this to ensure that there is no deterioration in upload and download speeds.

Chris Ashton reported that The LAN Remediation (Network upgrade) is under way. Next phase is the ET4L migration (which is merging MSC domain into the Education Department's). The teams   expect this to start next year and this will involve new people from the Department.

Suggested Action Plan

- Monitoring of eT4L Timeline
- Survey of Network effectiveness – Telstra has a domestic App that permits monitoring and Mapping-This could also be undertaken by the student body.

REPLACEMENT OF COMPUTER HARDWARE

Generally school computers are replaced on a 4 year cycle. However as a result of 100% BYOD penetration it is possible that a number of units may not need to be replaced. Funds can be redirected to getting machines with better graphics cards and superior screens more suitable for CAD and other applications.

Another consequence of a BYOD roll out is that the Air conditioning proposed for certain computer rooms may then not be required.

The Committee will probably review the position midyear 2016.

TECHNOLOGY SUPPORT PERSONNEL

It is a great credit to the technical team that they manage a network of scale and complexity with very sparse resources.

Recognizing the benefit of a school based specialist resource, the P&C has supported through partial funding Mr. Chris Ashton. Chris will   leave school by the end of this year to pursue other career advancement as well as the travel commitment to get to Manly has taken its toll. A new resource will have to be found before the new school year.

In the post eT4L environment "Full Circle Australasia Pty Ltd" will provide a layer of offsite support at reportedly about 55 $/Hour. They are a very competent group and have the support of the Technical Committee.

Full circle can also provide some on site services as well but it will be much more expensive than the 30$/Hour rates set for Chris Ashton in the budget, (We understand from market enquiry that this is not a market competitive remuneration – more so if we want to retain the skills in school over the longer term.)

Some upgrade and maintenance jobs can only be accomplished over the holiday periods - so resource availability over holidays may be one way to get ahead with processes.

Suggested Action Plan
- Discuss a funding budget
- Monitor resource requirements.

FUNDING FOR PROJECTS

A comment was made that successful technology blends into the background and becomes a ubiquitous enabler.

- The tech department purchased a unit of the Oculus Rift device which is built with immersive, virtual reality in mind. It uses gyroscopes and accelerometers to track the motion and movement of your head. It had been used well in the tech classes and there may be opportunities to increase the number of units available if requested by the Tech department to promote engaging learning experiences.
- There is a possibility that the science department could use some units of sensors and data loggers connected to the serial ports of computers to develop data capture with experiments. A full range of scientific sensors designed to measure current, pH, force, light, motion, pressure, sound, temperature, voltage, oxygen etc. are available with costs in the range of 300dollars a sensor.
- 3D Printers   - While we have some 3D printers it is expected that the school would need a few more to ensure there is a 3d Printer in every TAS workspace.

In general, we believe the approach to funding need not be as formal as the "innovation grant" process where paperwork and preparation of proposals and reports may work to inhibit teachers and students coming forward- maybe there is a case for having some pool of money that will encourage learning and experimentation.

STUDENTS TECHNICAL EDUCATION

We had some discussions whether students ought to be encouraged to take industry standard courses in Office Products and other programmes that they would need to be competent in the workplace of today.
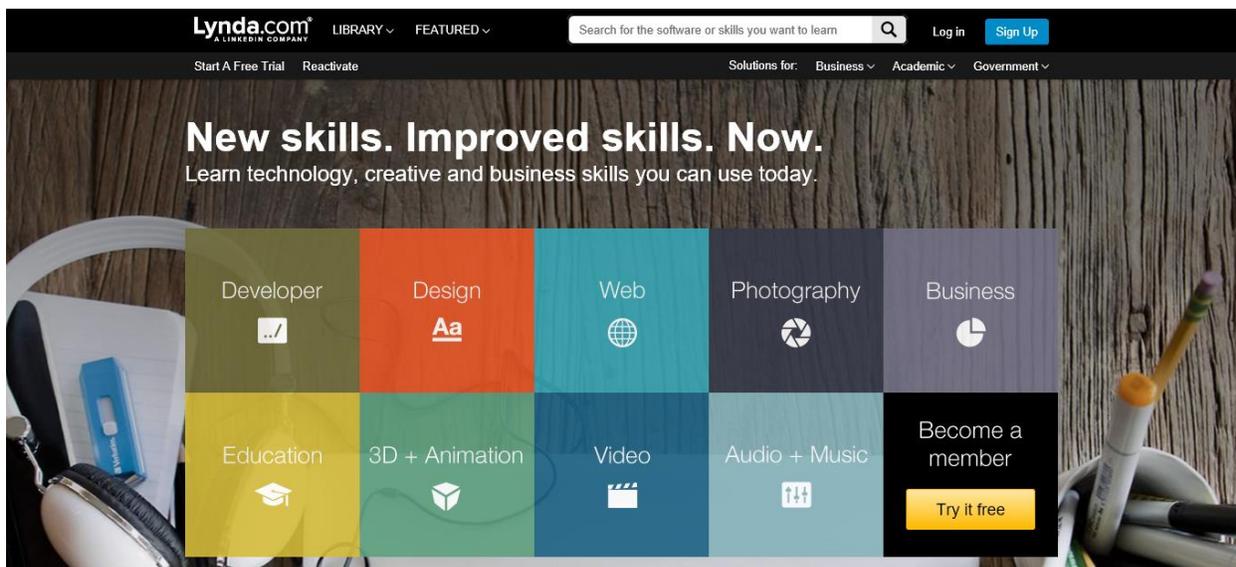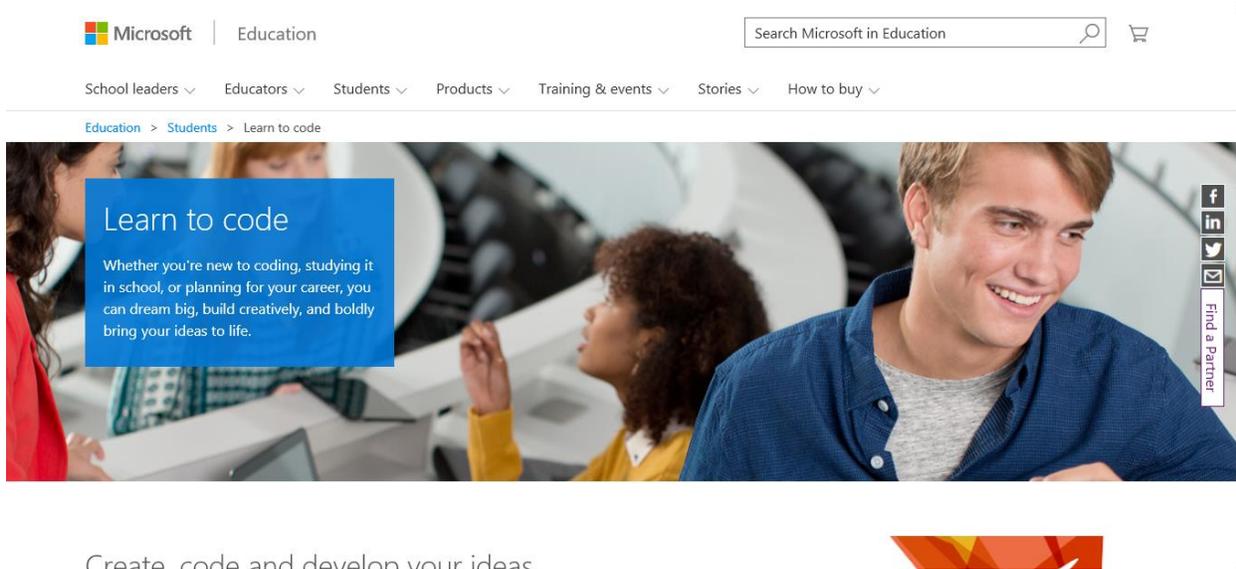
Peter Dawes suggested that perhaps insufficient use was being made of the Lynda resources already subscribed (3 Year subscription) for the school community. At MSC students need to be encouraged to use the excellent resources at www.Lynda.com The site Support K-12 teachers, staff, and students with on-demand learning and 21st century skills development . It is accessible to all students.

Action

Parents to encourage students to use available resources.

STUDENTS CAREER CHOICE SIMULATION

"Life Journey is an online experience for schools that empowers students to test-drive future STEM careers and learn directly from top industry professionals. Our mission is to provide students in schools across the nation the opportunity to learn about STEM careers, develop new skills, and understand industry challenges with the goal of helping them find their own passion. Working with top professionals from innovative start-ups and Fortune 500 companies (our Life Journey mentors), we're focused on inspiring students to pursue their dreams and providing them with an educational roadmap as they begin their own life journey from innovative start-ups to Fortune 500s

http://www.lifejourney.us/
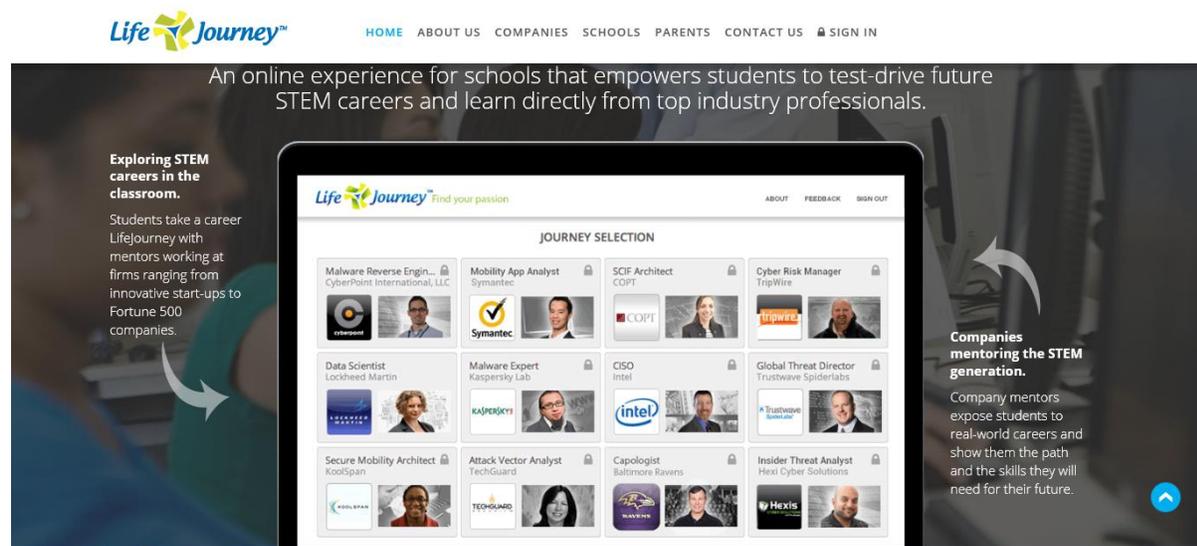
The Australian Government is also looking at similar approaches to Life journeys in 2016.

PARENTAL INVOLVEMENT AND FEEDBACK

Parents who have a question or suggestion are welcome to bring it to my attention.

I have a dropbox into which I place any interesting information from the school or from outside sources. I am happy to provide access to anyone interested.

https://www.dropbox.com/sh/qzogmvxlsiym8n9/AACjRF7NgJrAXdmY3KMP47gda?dl=0

Alternatively, we can have a link from the P&C website to these resources.

RE-ELECTION

I am happy to represent the Parent Group at the Technology Committee for 2016- if so re-elected / directed.

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Sydney

25th November 2015.