Technology News for Schools

this issue

Bebras Australia Computational Thinking Challenge

Australia's largest student computational thinking / computer science challenge returns 14-25 March, 2016.

Bebras promotes computer science among primary and secondary students (*y3-12*). The purpose is to expose students to ICT-based logic concepts without the need for prior digital technology or coding knowledge. Over **32,000 Australian students** from more than **1,100 schools** have participated in Bebras since 2014.

To solve the tasks, students need to think about logic, digital technologies, discrete structures, computation, data processing, and algorithmic concepts. Students can work in teams and will find solving the problems very rewarding. **The Bebras website** has some very clear examples of what's involved.

Bebras is free for schools and is run online in just one hour. Teachers can select when their students take the challenge during March. Students from Years 3 to 12 participate in age-based groups. No prior coding or ICT knowledge is required.

Wi-Fi in schools

As a legacy of the Commonwealth Digital Education Revolution program, all secondary schools in NSW have had a wireless access point (WAP) installed in every classroom or learning space since 2009. Since then, most primary schools have invested in Wi-Fi infrastructure to support and enhance teaching and learning.

Wi-Fi has provided students with access to a wealth of on-line learning resources at their desk and on the go through a wide variety of very common and popular mobile devices.

- *The Department's provision and support of wireless technology is a response to the expectations of principals, teachers, parents and the broader community that NSW schools offer a modern, digital learning environment.*

- *DoE makes every effort to minimise RF exposure – mounting WAPs away from children, using equipment that meets Australian standards and advising that devices are used on desks, not on laps.*
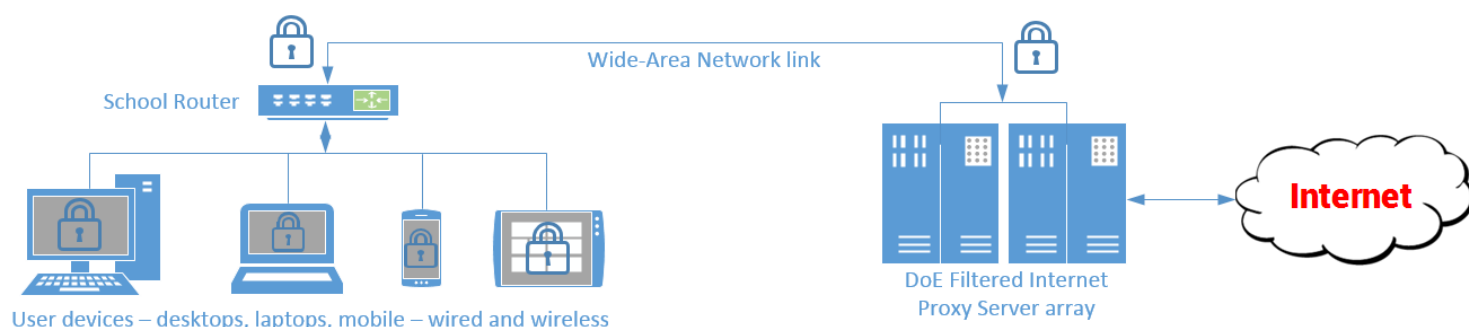
A recent episode of ABC's Catalyst program has raised concerns among parents around the use of Wi-Fi in schools and with children

- *We rely on **reputable scientific data** for risk assessment – specifically from ARPANSA (Australian Radiation Protection and Nuclear Safety Agency), who set the standards in this area for the Commonwealth of Australia. ARPANSA does not consider the levels of radio frequency electromagnetic radiation (RF EMR) to be an established health risk.*

ARPANSA has **issued a statement** in response to the Catalyst program confirming its position that *"there is no established scientific evidence that the use of mobile phones or Wi-Fi devices cause any health effects."*

SECURE PROXY AUTHENTICATION: protecting student and staff credentials

Wide-Area Network link

School Router

User devices – desktops, laptops, mobile – wired and wireless

DoE Filtered Internet Proxy Server array

Internet

What is SPA?

In 2006, the Authenticated Internet Browsing and Email service launched and all staff and students were provided with individual accounts with year-level filtering intro-duced. In order to access the Internet, users authenticate with their DoE Portal ID & password.

The filtering service is accessed by authenticat-ing to the department's proxy servers which have recently been updated. The update provides for a new authentication pro-cess with **user credentials encrypted** and securely sent to the proxy server.

SPA rollout timing

A successful pilot of SPA was conducted in Term 4. A process is now in place to individually cutover each **High** and **Central** school **by the middle of Term 2**, then complete the cutover of all remaining schools during Term 3.

Each school will be con-tacted directly to notify your cutover date. Some local preparations will be required to ensure all staff and students are ready for this important change.

What your school needs to do to be ready for SPA

Schools will be cutover to SPA progressively in large cohorts. For consistency, SPA cutover day will be either be on a **Wednesday** or a **Friday**, although the actual change will occur the evening before.

ITD will provide each school with **at least two weeks' notice** before SPA is configured for the site. In that allocated time, it will be important for the school to:

- *Understand **what changes SPA will bring** to the school and the user experience by reading [this Fact Sheet](#)*
- *Effectively **promote the school's scheduled SPA Day** to ensure all students and staff are ready for the upcoming change and deliver a smooth transition*
- *Download the [other SPA Resources](#). Print off the posters and hang them around the school. Publicise the infor-mation via email, your school intranet and other commu-nications channels used by your school*
- *If your school has **a BYOD program** for either staff or stu-dents, SPA will affect your users. It's important to make sure they **prepare their personal devices** on SPA Day*
- *If your school has **a Sentral server** or some other form of **local proxy/caching server**, read the fact sheet in the above linked resources. There are some changes that may be required*
- *Do any of your **staff use Dropbox client?** Unfortunately it's not compatible with SPA and will stop functioning. **Get ready. Secure Proxy Authentication is coming.***
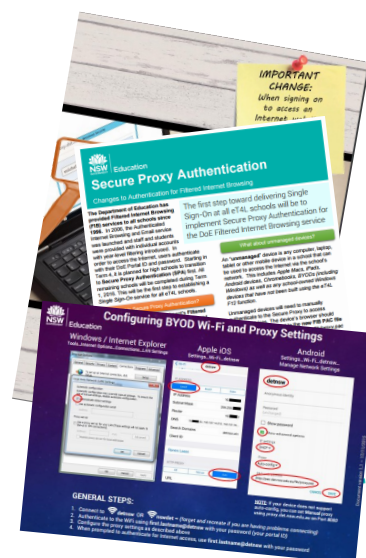
What is Single Sign-on?

SPA is the first step to establishing a Single Sign-On service for all eT4L schools. On eT4L Windows devices, once logged onto Windows, it will remove the need to authenticate again for Internet sessions.

The next phase of Single Sign-on due in the second-half of this year will see the Windows logon be ap-plied automatically for the DoE Portal, Email and most corporate applications, meaning you won't need to authenticate multiple times every day.

The way all users access the Internet at school will soon be changing.

For high and central schools, the change starts this term. For all other schools, it will start in term 2.

Useful resources:

To assist your school with the upcoming change to SPA, we have prepared **Fact Sheets**, **posters** and **other useful infor-mation** that you can share with all staff and students. This change will occur for your school on a specified date and as long as the school is pre-pared, this important cutover should be fairly simple. **Your cooperation in driving this change locally is appreciated.**

Office 2016 Desktop

Learning Systems' support for Office 365 and Google Apps for Education continues in 2016 as part of the **Rural and Remote Online Collaboration project**.
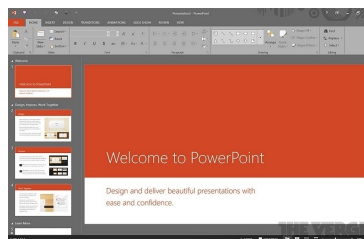
The latest version of the Microsoft productivity suite, Office 2016, comes with a host of new collaboration features and other benefits.

For schools using Office 365 with their students, robust compatibility for offline editing and opening cloud-based files and documents locally, means a better user experience overall. NSW DoE is making Office 2016 for Windows available to eT4L schools as an easy upgrade from Office 2010 **via simple deployment from UDM**.

Office 2016 represents a significant upgrade in features and a change of user interface from Office 2010. Rather than forcing all users to upgrade at the same time, Office 2016 is being provided to schools as an optional upgrade. This will allow schools and even individual users to apply the upgrade when they are ready to do so.

Schools can conduct their own user familiarisation and training if required, then deploy the package in a managed way.

Major improvements to **One-Note, PowerPoint** & **Publisher** in particular will be quickly noticeable by students and teachers, while enhancements to the core programs of **Word** and **Excel** will be most appreciated by the front office and school executive.
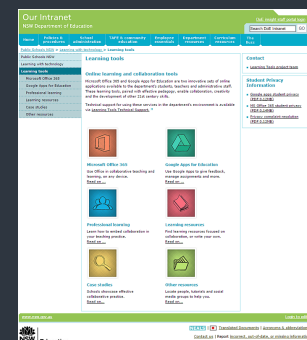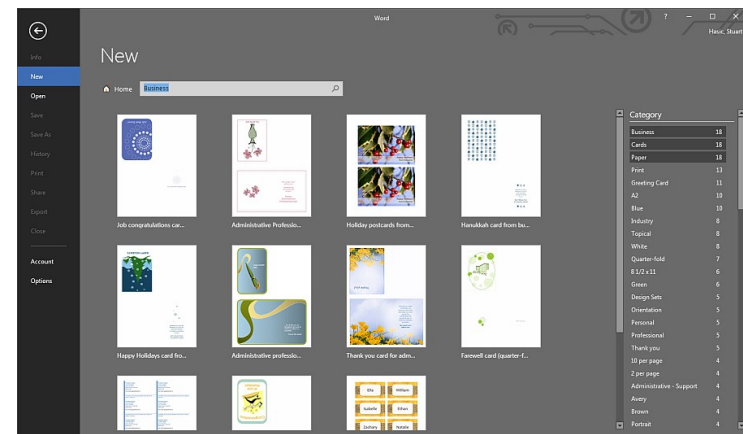
Final compatibility testing with corporate applications is occurring now and **advice and support resources** to assist schools considering upgrading to Office 2016 will be made available soon.

At this stage, plans are in place to make the Office 2016 installer package available in UDM and from the ITD FTP share for non-eT4L schools later this year.

The **Learning Tools pages** outline opportunities to learn and contribute to this project, including a case study program where schools produce a Class-Movie documentary highlighting innovative practice - see the week 5, term 1 SchoolBiz for more details.

The website also provides information about:

- *online teaching and learning resources*

- *workshops in online collaboration to support innovative pedagogy in our rural and remote schools*

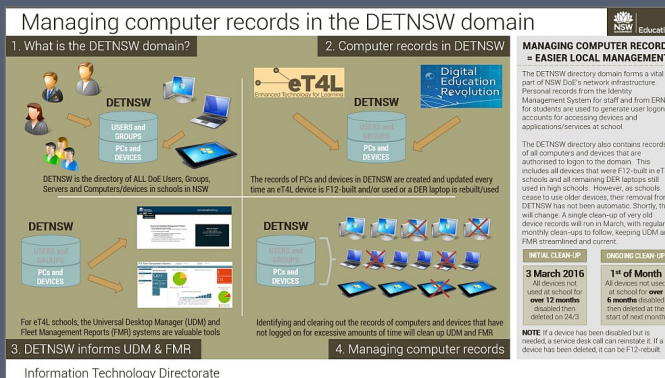- *the development of a mentor network for online collaboration*

Keep your eyes on SchoolBiz and the Learning Tools pages for more announcements.

eT4L delivering easier local management

eT4L schools are using the Universal Device Manager (UDM) and Fleet Management Reports (FMR) tools to deploy software and manage their fleet of Windows computers.

Information Technology Directorate is establishing a new regular process to better manage computer records in the DETNSW domain. Full details in the linked infographic.

Click this image to view/print the infographic

INSPIRE INNOVATE 2016 CONFERENCE

9 – 10 March

This conference **now in its 9th year** supports school leaders and K-12 teachers across NSW to enhance pedagogy and quality curriculum implementation and enriches the capacity of principals and aspiring leaders to lead innovation and change in their schools.

This year, one of the keynote speakers on day 1 is **Jennie Magiera.** She is the Chief Technology Officer for Des Plaines School District 62, previously the Digital Learning Coordinator for the Academy for Urban School Leadership and a Chicago Public Schools math teacher. She is a White House Champion for Change, Apple Distinguished Educator, Google for Education Certified Innovator and TEDx Speaker. Jennie has been working to redefine teaching and learning through innovative new practices and her keynote is certain to be a highlight of the conference.

A further three keynotes and a choice of 80 showcase and practical sessions provide two packed days of inspiration and motivation for the delegates in attendance.
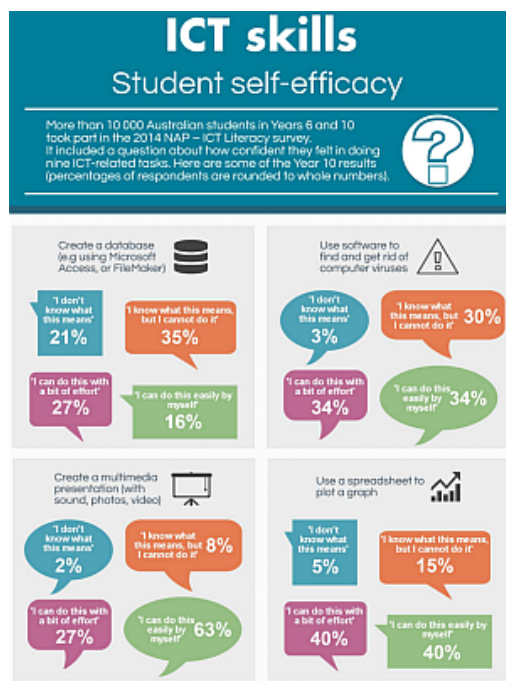
Once again, the venue is the ANZ Stadium at Sydney Olympic Park. More details via the links below, but get in quick to secure your place.

- **Conference program**
- **Register to attend**

Digital Literacy in Years 6 and 10

Literacy in information and communication technology is critical to students as they progress through schooling and enter a world in which technology is ubiquitous.

To assess progress in this crucial part of student learning, ACARA conducts a National Assessment Program (NAP) aimed at measuring ICT literacy. In 2014, over 10,500 year 6 and 10 students were tested. **A comprehensive report is now available**.

A survey asked the students about their confidence in doing specific ICT tasks. *Click the image above to see their responses as an infographic*.

Google Forms update

Google has recently introduced several new key features and updates to their Forms tool. If you haven't yet discovered Forms in your Google Apps for Education, you're missing out on a great tool for online surveys.

With new Form add-ons available, easy viewing of individual responses, new form templates to get you quickly creating forms and an easy response tracking feature, Google Forms is a *must-have* for teachers.

Become an Adobe Education Trainer!

How would you like to get Adobe Education Trainer for Creative Cloud credentials? Train the Trainer is a free, eight-week online course designed to equip education trainers worldwide with the knowledge, skills, and tools to successfully design and deliver effective, engaging Adobe professional development.

Upon course completion, participants will be able to design professional development sessions that empower and inspire students, teachers, and faculty to foster creativity and design innovative digital media. Participants who successfully complete the course will earn an *Adobe Education Trainer* credential and be endorsed by Adobe as a leader in the education technology training space.   This **on-line course commences 1 March 2016**.

Full course details can be found at the **Adobe Education Exchange**.

Free posters for your classroom from NASA

NASA's Jet Propulsion Laboratory has designed a series of visually stunning space travel posters and made them available for free download and printing. There are familiar planets, exoplanets, moons as well as two tour posters. Each poster is representative of a specific historic space mission. Dress up your classroom with **NASA's Visions of the Future**.