



ScopeIT Education

ET Staff



Coding is fast becoming an essential skill for students to have and as schools look to include programming in their curriculums, the question remains, how?

Options might include retraining teachers, hiring someone or looking to an external provider. Established in NSW and now across the eastern states, ScopeIT Education offers a complete turnkey service for teaching code; they provide everything from instructors and equipment, including a 3D printer, to lesson plans and student assessment.

"We have structured the program so that once given the word we are able to get up and running in schools immediately. ScopeIT Education provides everything that is necessary; we bring Macbook Air laptops to every class, which are secured so students are only able to do schoolwork-based activities. All the teaching software we use is web-based and open to the students and teachers to continue learning even while we aren't there.

"The idea is to use software like Scratch to introduce students to how languages work and provide an understanding of the algorithms that lie beneath them"

"Students work in pairs, fostering collaborative teamwork and problem solving", says James Fry from ScopeIT Education.

ScopeIT Education has entered into partnership with the Australian Primary Principals Association (APPA), an indication that teaching coding skills to primary students is very much on Principals' radars. APPA believe that the ScopeIT solution will deliver on many of the curriculum outcomes across the STEM subjects.

Classes are designed to be accessible to all students, aiming to get kids coding regardless of their background. The courses were designed

in consultation with one of Australia's leading curriculum experts to ensure that schools did not need to make trade-offs with other important school activities.

The current courses cater to Stages 1 to 3 with students gaining an introduction to languages like Scratch, a largely drag and drop programming tool created and released free by MIT's Media Lab with younger programmers in mind.

Wordpress, HTML, Javascript, Python, as well as coding iOS apps are further courses ScopeIT offers, taking the children on a journey as they build their understanding of coding through their primary years. Robotics, 3D printing and Digital Skills are also on offer, as well as Digital Citizenship, a shorter course designed to develop responsibility and safety online.

"The idea is to use software like Scratch to introduce students to how languages work and provide an understanding of the algorithms that lie beneath them," Fry says. "Something as simple as teaching children that programming

reads 'down' the page and not 'across' the page is one of the key early lessons that Scratch teaches".

Each course is designed as a weekly 40-minute lesson across a 10-week school term. Starting with basic coding principles and design, subjects were written to build on each other culminating in sophisticated robotics, website and app development.

ScopeIT Education supplies two instructors per class, 'Scopers', who look to work with existing teaching staff," Fry says. "We find classroom teachers are participating with the students in our classes as they develop their own skills in this space".

Early adopters like Mt Kuring-gai Primary School have been enthusiastic. Students from Grades 1 to 6 have commenced beginner coding courses and are on a pathway that will send them to high school with a comprehensive ability to design and build their own apps, websites, videos as well as strong robotics skills.

Mt Kuring-gai students will also learn to be responsible digital citizens, understanding on-line safety and responsibility.

ScopeIT Education is a cost effective approach as schools can avoid the fixed costs of buying equipment and a guarantee that the equipment and content is the newest and most cutting edge available.

"Coding is more than learning the language. It's a powerful learning tool that teaches computational thinking and delivers



reasoning skills. It reinforces, working memory, collaborative problem solving and teamwork. It's understanding the technology we all use, moving kids from being passive users of technology to giving them the ability to create their own apps, websites, electronics and 3D designs", says ScopeIT Education founder Frank Lucisano.

"If Australia wants to remain at the forefront of a global economy in the future then we need to start preparing our children for their 21st century future now. Children today will not have a job that does not involve technology on some level, let's give them the skills to innovate and not simply participate."

ET

Wireless Emergency Alert System

..how quickly could you raise the alarm?



Introducing the Australian developed
"WiLAS" Wireless Alert Siren System

STOP the Confusion

- Wirelessly networked and activated
- Easy & inexpensive to install
- Loud, distinct, multiple siren tones + VOICE alerts
- Scalable design for any site
- No central point of failure, operates in power outage



WIRELESS REMOTE



OUTDOOR SIREN



WIRELESS BEACON

GET SAFE - Call or email for a quote today
P: (02) 8037 5500
E: sales@emergencyalertsystems.com.au
W: emergencyalertsystems.com.au

