AUSTRALIA 🛇

NEWS (/EXPLORE/NEWS/)

DIRECTORY (/EXPLORE/DIRECTORY/)

LOG IN (/ACCOUNTS/LOGIN/)

EVENTS (/EXPLORE/EVENTS/)

EXCURSIONS (/EXPLORE/EXCURSIONS/)

TECHNOLOGY (/TECHNOLOGY/)

RESOURCES (/EXPLORE/RESOURCES)



All ⊘ Category ⊘ Location ⊘

News (/explore/news/) > Technology (/explore/news/technology/)  $\,>\,$  Coding - it's about making things happen Facebook 55 Twitter LinkedIn 1 Email More 8

# Coding - it's about making things happen



By Walter Barbieri (/author/user/13154/) Community contribution / April 24, 2017

Coding was once a hobby for the 'computer-whiz', now it's a commonplace tool providing solutions for real-world challenges. With coding set to take the world by storm, it's our duty as educators to prepare students for jobs that will eventuate in this area. At St Peter's College in Adelaide, we're trying to go above and beyond so that coding becomes a part of students' everyday language.



### THE LANGUAGE OF EVERYTHING

When linguist John Austin wrote How to do Things with Words in 1962, he created a new linguistic category: performative language.



By Walter Barbieri (/author/user/13154/)

### COMMUNITY

Walter is director of eLearning at St Peter's College in South Australia.

He observed that in certain circumstances words can achieve practical, concrete effects

Much like physical phenomena, performative language has an impact (be it social, moral, emotive or legal) that is predictable and undisputed.

An obvious example of performative language is legal expression, whereby the words a judge utters become the reality of the defendant and plaintiff. It is this linguistic theory that sits at the basis of the protections that we enjoy against vilification and speech that incites violence.

While Austin could not have predicted it, the most performative language of all is coding.

Coding is the language that makes things happen. Its meaning is functional and practical, as it achieves instant results.

Using Austin's words, it does things. Much like traditional languages, coding is also (theoretically) limitless in its creative potential.

There is no end to the on-screen events that coding can instigate. In digital contexts then, coding is the language of everything.

This certainly seems to be the realisation that more and more Australian students are making.

They see in coding – be it .net, HTML, Swift or Python – the tools through which they can access a vast future of creativity and productivity.

### CODING IN EDUCATION SYSTEMS

Nationwide, the economy's demand for coding is intense, and we have seen the Federal Government respond through the Digital Technologies curriculum.

But is this enough? Beyond the content descriptors in this subject, no directives specify how much time should be dedicated to learning coding, nor are there any formal coding qualifications required of teachers of coding.

This is in patent contrast to the UK's National Curriculum, which in 2014 declared computing education a statutory right from Year 1 onwards, which comes with designated time allocation and specific staff training requirements.

The emphasis of the UK's computing curriculum also reveals a clear shift away from using technology to making it.

In the UK, a C has joined the three Rs. In comparison, the Digital Technologies component of the Australian Curriculum, with its 11 content descriptors across Years 9 and 10, seems meagre at best.

Indeed, if the number of additional initiatives that have recently been launched are any indication, the Australian Government probably agrees.

# 



### Similar news

Feature / Don't make learning happen, let it happen (/news/23133/dont-make-learning-happen-let-it-happen/)

Technology / DATTA Vic conference focussed on making teaching with tech approachable (/news/37479/datta-vic-conference-focussed-on-making-teaching-with-tech-approachable/)

Technology / Experiment, make mistakes and learn (/news/35634/experiment-makemistakes-and-learn/)



## Latest comments

I find this article interesting as like most of our parenting in Australia it targets "techniques" or lack there of f...

— Timothy Drown on Five Barriers To Tough-Love Parenting (/news/38734/five-barriers-to-toughlove-parenting/) In the past two years, federal and state-funded programs that promote coding in schools have seen various initiatives emerge.

These include: the Embracing the Digital Age program; the National Innovation & Science Agenda; Anyone can Code challenges for Years 5 and 7; Cracking the Code events for students in Years 4 to 12; ICT Summer Schools for Years 9 and 10; Digital Literacy School Grants and a MOOC produced by CSER and Adelaide University aiming to upskill teachers of coding.

Coding is the primary tool through which manufacturing jobs are being automated, so it is reasonably easy to predict that coding will play a much more important role in future curricula.

By definition, this means that any forward-looking school should be seeking to develop models that can see coding become part of school culture.

Coding Society at St Peter's College, Adelaide

At St Peter's College, Adelaide, we understand that coding is not to be conceived as a hobby for the stereotypical 'computer-whiz', but rather a commonplace tool through which students can create solutions for real-world challenges.

Beyond the delivery of the Digital Technologies Curriculum through timetabled ICT classes, St Peter's College hosts a Coding Society that has grown to become the most attended voluntary activity within the school.

Since 2014, it has orchestrated a range of age-appropriate programs.

Today, the Coding Society is regularly attended by almost 100 students – all of whom forfeit their lunchtime in order to participate.

The Coding Society is entirely run by students during two lunchtimes every week.

Technology teachers assist through the provision of physical facilities and low-key supervision, but the content, software and teaching methods are devised and delivered by students to students.

The driving principles behind the student-run Coding Society are sustainability and relevance.

To achieve sustainability, the most skilled learners gradually begin to lead sessions, to ensure smooth succession once students leave.

To achieve relevance, the student-teachers focus on an in-school problem awaiting a digital solution, and then deliver tuition on languages ideally suited to the situation.

Therefore, while the languages covered include .net, HTML, Swift, Python and C++, it's not really about the language, but rather about what you do with it.

The results have been astounding. Junior School students have devised a simple computer game intended to help users learn the principles of positive psychology (the basis of the school's wellbeing program).

The Senior School Coding Society has developed a fully resourced sixweek teaching unit, which is now delivered in Year 7 technology lessons.



### Top events

Professional Development / 19 hours, 9 minutes ago / Melbourne Delivering Kitchen Garden Classes (/events/38974/melbourne-deliveringkitchen-garden-classes/)

Conference / April 24, 2017 / ATOM 2017 State Conference Re:Design (/events/38953/atom-2017-state-conference-redesign/)

Professional Development / April 24, 2017 / Pedagogies for Civics and Citizenship (/events/38945/pedagogies-for-civics-and-citizenship/)

This readyto-use unit, with lesson plans, assignments, resources and feedback structures, is oriented around Sphero devices (moving spheres controlled by lines of code).

Within the lessons, students design 3D racing tracks, print the components to assemble the tracks, then code the high-tech balls to traverse the tracks autonomously.

The students then race each other by pressing start and testing how well the Sphero balls negotiate the tracks.

When St Peter's College expressed the desire to develop an online virtual tour for prospective families, the Coding Society sprung into action.

Combining landscape, drone and underwater photography, students began creating a digital hot-spot map of the school, through which online users will be able to investigate the school's facilities and educational programs.

The web tool is due to launch in a few months' time. The school's entire intranet platform (Keystone) was built in-house by an on-staff development team.

Now due for a re-vamp, the Coding Society is working on its makeover.

For a 2018 launch, students have designed new Keystone concepts and presented their ideas to the group of student coders.

An election process has chosen the winning design, which is now being coded by every member of the Coding Society.

Considering the breadth and quality of the projects it has led, it is not surprising to see the St Peter's College Coding Society begin to foster some truly remarkable talent in this field.

Such is the case with 2016 alumnus Dallas McNeil, who has already successfully released two iOS Apps on the App Store – and about whom we'll no doubt hear more in the future.

This story appeared in the April 2017 edition of *Australian Teacher Magazine*.

Facebook 55 Twitter LinkedIn 1 Email More 8

O comments 

Join the conversation





Teacher

St Finbarr's Primary School Quilpie
Full time | Fixed Term | 1 May to 1 December 2017

Teaching - Primary / Apr 26, 2017 (/jobs/38976/teacher/)