

Break out – CS in School Curriculum / CS Teaching

NZ 2014 - first year for graduates for tech in schools for NZ, taught since 2011 - improvement in students level of tech skills entering university. Web algorithms etc

Issues - schools not highly resourced by government. Google has provided support. Not enough teachers with ability to teach tech curriculum, teachers using mix of languages.

Assume they know search and sort algorithms for first year courses. They are using Java... Accelerated course for those who have done this

Australian context

Curriculum released for use in primary schools, despite lack of government approval. Three states going ahead with it anyway (?). Google very supportive in developing online course for primary school teachers to up skill them.

How do we prepare for this in terms of providing alternate curriculum for those entering Australian universities?

Australian curriculum from year 1-10

Demands on school teachers from acara very high

ACS - developing education standards for teachers delivering the curriculum. Aligned with NICTA digital careers. ICT educators board working with all parties to identify what pd for teachers needs to look like

Curriculum for years 7 and 8 under development. 8 and 9 next but will be challenging

220 teachers attending sessions in NZ

In the US studies show that offering of computing in schools is highly

correlated with socio economic status. Is the same happening here?

Anecdotal evidence says yes. top schools in NZ won't teach IT for fear of dropping in league tables

CORE could collect data from uni / schools where this has been tried
Paul (ACS) CORE could look at what acara is including in curriculum (currently "university light"). Say "Don't do programming - do English, maths and science"

Alan vigorously disagrees, as a significant volume of work went into this. "PMs poodles" undertook curriculum review which fed into this process

New teachers doing the MOOC in SA

Increase engagement with Education faculties in Universities to give graduate teachers increased tech skills.

ACU embedding teaching of tech skills in education courses

Swinburne tried to engage but couldn't make it work. Monash the same.

ACU trying to develop partnerships

Decision to adopt tech in schools is state based

NZ trying to get academics and uni students to go out to schools to engage and promote 80% of primary teachers are generalists and have to teach everything...

ACDICT activity in this area has tapered off...

ACS don't formally engage with CORE for the ACS BOK...

What pre requisite do trainee teachers need to do ICT?

OO addressed in curriculum but at a superficial level

What can CORE do to increase the education side of ICT, possibly through assisting academics with their promotion applications?

Do institutions value teaching focussed positions? General feel was not so much. Union stopped it in one instance (UTS). UQ have research only, T and R and TO. On balance, some universities do this well, some not so much. ANU don't allow teaching only. Teaching and research equal in promotion structure. La Trobe has required staff to choose as part of the restructure.