

# Always Learning

AUSTRALIAN SCHOOLS EDUCATION MAGAZINE

Issue **1**

SECONDARY  
**Science**

[www.pearson.com.au](http://www.pearson.com.au)

## Stephen Heppell interview

We talk to the leading voice of ICT in learning

What's next for Massive Open Online Courses

Lifestyle: Back to school essentials

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## IN THIS ISSUE

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Welcome to the first issue of Always Learning magazine for 2014. If you have read our magazines in 2013 you'll already know that you'll find education-related news, articles on topical subjects, a lifestyle section and an overview of Pearson resources, every term. To all our new readers, welcome to the Always Learning 2014 back to school issue.

This issue is a great one to keep and reference for professional development throughout the year; make sure to review What's New in Pearson Professional Learning on page 2. There are new events added all the time, so check in at [www.pearson.com.au/pl](http://www.pearson.com.au/pl) to discover upcoming events in your state.

We took the opportunity of Stephen Heppell's recent trip to Australia to ask him a few questions about the role of technology in learning and the shape of education in the future. The full interview is on the Always Learning Newsroom, but you can find an excerpt on page 5.

Other articles include Dr Jeff Borden's take on the future of Massive Open Online Courses (MOOCs), Rob Sieben's discussion of 21st Century learning and the Always Learning team's fun must-haves for back to school.

We have a lot planned for 2014 and look forward to having you along for the ride! If you have any comments or feedback, or if you are interested in contributing to Always Learning magazine, please email me at [alwayslearning@pearson.com.au](mailto:alwayslearning@pearson.com.au).



Malcolm Parson, Head of Content Creation  
Pearson Australia – Schools Division

### STEPHEN HEPELL INTERVIEW

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An excerpt of our interview with leading educator Stephen Heppell



©ADEL HARBIB

### THE PROBLEM WITH MOOCs

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SHUTTERSTOCK

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# WHAT'S NEW IN PEARSON PROFESSIONAL LEARNING FOR 2014



**2014 CONFERENCES – BOOK NOW, PLACES ARE LIMITED**

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## ADVENTURES IN EARLY CHILDHOOD

**Register online:**

[www.pearson.com.au/pl/earlychildhood2014](http://www.pearson.com.au/pl/earlychildhood2014)



The conference will bring together leading educators in the field of early learning who are passionate about teaching children in the foundation years of their schooling, including keynote presenter Dr. Noella Mackenzie.

Explore contemporary research in creative thinking and its impact on improving student outcomes in the early years of learning (ages 4-7). Enhance creative thinking for children in your classroom through best practice, the Australian Curriculum and current research.

**20 & 21 MARCH NSW | 27 & 28 MARCH QLD  
1 & 2 MAY VIC | 8 & 9 MAY WA**

## LILE2014: THE LEADERS IN LITERACY EDUCATION

**Register online:**

[www.pearson.com.au/pl/LILE2014](http://www.pearson.com.au/pl/LILE2014)

This Pearson Leaders in Literacy Education Conference brings together leading national and international educators in language and literacy education. The conference will provide opportunities for educators to explore the latest research in language and literacy education and how this connects to classroom practice.

Empower F-12 students to understand the notion of meaning making, giving them the skills to become effective communicators in our multi-literate world.

Choose from up to 30 concurrent sessions that will provide new and innovative ways to engage learners K-12

**5 & 6 MAY NSW | 22 & 23 MAY VIC  
26 & 27 MAY QLD | 29 & 30 MAY SA**

**Earlybird registration and groups of 5+  
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## 2014 WORKSHOPS

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These are some of the highlights from the 2014 workshop calendar. You can browse the full selection online at: [www.pearson.com.au/pl](http://www.pearson.com.au/pl)

### Art and music

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#### **Adventures in Art and Music with Technology**

MARCH *Sydney*

#### **Adventures with iPads in Art and Music**

MARCH | MAY *Melbourne*

### Wellbeing and resilience

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#### **Bounce Back!**

FEBRUARY *Brisbane* | MARCH *Adelaide*

MARCH *Perth*

#### **Bounce Back! Phase Two – Refreshing your Program**

MARCH *Melbourne* | APRIL *Sydney*

### English and literacy

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#### **An Introduction to Fountas & Pinnell's Levelled Literacy Intervention**

MARCH | AUGUST | OCTOBER *Melbourne*

MAY *Hobart*

#### **Digital Storytelling to Captivate Your Students – Primary**

FEBRUARY *Melbourne*

#### **Teaching Spelling Using Words Their Way: Level 1 – 10 Easy Steps to Implementation**

FEBRUARY *Brisbane* | FEBRUARY *Darwin*

MARCH *Adelaide* | MARCH *Hobart*

MARCH *Melbourne* | APRIL *Perth*

JUNE *Perth*

#### **Integrating Words Their Way into your Word Work Program: A practical approach!**

FEBRUARY *Canberra* | FEBRUARY *Mackay*

#### **Words Their Way Level 2 : 10 Weeks of Instruction**

FEBRUARY *Brisbane* | MARCH *Adelaide*

MARCH *Melbourne* | APRIL *Perth*

### 21st Century Skills: thinking Skills, motivation and engagement

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#### **Critical and Creative Thinking: Developing Thinking to Support the Australian Curriculum**

MAY *Melbourne* | MAY *Canberra*

JUNE *Hobart* | JUNE *Adelaide*

#### **Developing Thinking and Understanding: An Introduction to Philosophy for Children**

MARCH *Melbourne* | MARCH *Adelaide*

MARCH *Canberra* | APRIL *Hobart*

#### **Maximising Student Engagement and Learning – Putting Research into Practice**

MARCH *Perth*

#### **Motivating the Unmotivated**

FEBRUARY *Sydney* | MARCH *Melbourne*

MARCH *Perth* | MARCH *Brisbane*

#### **Transforming Learning in Schools**

FEBRUARY *Perth*

#### **Using Thinking Tools to Promote Excellence in Learning**

MARCH *Sydney*

### Digital Learning

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#### **How to Create Successful Learning in Your Classroom Using Digital Strategies**

MARCH *Brisbane*

#### **Instructional Design for Beginners - Planning Innovative Units of Learning for Students!**

FEBRUARY *Brisbane* | FEBRUARY *Hobart*

MARCH *Melbourne*

### Educating boys

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#### **Educating Boys for Successful Learning**

MARCH *Adelaide* | MARCH *Hobart*

#### **Teaching Boys to Write and Write Well!**

MARCH *Sydney*

**Find the full list of events and register online at:**  
**[www.pearson.com.au/pl](http://www.pearson.com.au/pl)**

## LIFESTYLE

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# BACK TO SCHOOL

BREEZE BACK INTO THE CLASSROOM WITH THESE BACK TO SCHOOL ESSENTIALS

## SENSATIONAL STATIONERY

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01

Need to travel from room to room and don't want ink stains in your pocket? We love this Smiggle Babushka Hardtop Pencil Case (\$14.95) [www.smiggle.com.au](http://www.smiggle.com.au)



## DELICIOUS DEALS

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03

Keep a Spritta apple slicer (\$7.99) at school to quickly create fresh apple wedges for lunch or recess [www.ikea.com.au](http://www.ikea.com.au)



## CONQUERING THE COMMUTE

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02

There's nothing you can do about traffic, or people behaving badly on the road, or a packed train. But you can easily take your mind off it with an audio book or a good Podcast.

Expand your horizons with *Stuff you Missed in History Class* - a compelling Podcast on a variety of historic events and people and available on iTunes for free.

Or try *Audible* for a truly astounding range of audio books, radio plays, famous speeches and other audio content! Plans start from just USD \$14.95 per month [www.audible.com](http://www.audible.com)



FOTOLIA

## SAVE YOUR SOLES

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04

Being a teacher involves spending a lot of time on your feet, which means comfortable shoes are essential. Whether your preference is for sandals, sneakers or sensible heels, there are some great online stores where you can browse a range of men's and women's shoes designed with both fashion and comfort in mind and have them delivered to your door: [www.comfortplusfootwear.com.au](http://www.comfortplusfootwear.com.au) and [www.hushpuppies.com.au](http://www.hushpuppies.com.au)



FOTOLIA



# THE POWER OF THE LEARNERS' VOICE

We interviewed Stephen Heppell on his recent visit to Australia and asked him about tomorrow's learners, the classrooms of the future and how you can guide students to help with their own learning.



## **HOW WILL LEARNERS OF TOMORROW DIFFER FROM LEARNERS OF YESTERDAY? AND HOW DO TEACHERS PREPARE FOR THEM?**

There's no ripple in the gene pool. We have the same kids today as we had in the past, with the same DNA. However, the world is different. The first big change is that we know about processes for learning better, so kids will be less tolerant of things that are palpably useless. That makes them not critical, but questioning. Even today, we ring a bell and expect all the kids in the school to be hungry at the same time. We wouldn't expect that from a thousand rats in a laboratory, so why do we expect it of kids? Kids are beginning

to become critical and questioning of processes because they're beginning to understand more how their own brains work.

I remember being told when I was a kid that your brain peaks at about 17, and it's all downhill after that! We know now that kids actually keep on learning. That meta-cognition of understanding of learning doesn't peak until the mid-seventies, presuming nothing else goes wrong.

Today's and tomorrow's learners are going to be really critical of bad practice. They're also global learners. They're comfortable with grazing media and content from around the world, wearing clothes branded from companies around the world. I've had the privilege

[continued >](#)



of working with schools that mark maps on their wall with contacts from around the world that they Tweet and Skype. This doesn't fit very well with national curriculum or policy that instructs learning and content in a different way; I think in some ways kids are more advanced than we are in that way.

Let's take an example. There are kids all over the world in innovative classrooms where they write on walls, on desks and on windows. They then take copies of their work by photographing it with their smartphones and taking it home. If at the end of the day though, you asked the kids to repeat it all down word for word in their exercise book, you would think it was a complete waste of time! Yet teachers write on the wall and expect students to copy it down. There's not much evidence that copying makes a concept stick in your mind. Space learning, disclosure (hiding and showing things), collaboration, asking kids to lead the lesson and a more engaging approach do help learning, to name a few, but not the act of copying itself.

### **YOU'VE OBSERVED THAT WE SHOULD HARNESS THE POWER OF THE LEARNERS' VOICE. CAN YOU EXPLAIN MORE ABOUT THIS?**

After the war, with the Baby Boomer generation, there wasn't time to question the style of learning in schools, so learning was designed by the educator for the learner, without their input. Later when technology came along, kids were naturally pretty good at it. It seemed foolish to think we would know everything we needed to know without input from the kids themselves – thus the idea of educators co-constructing learning with the student worked quite well.

In today's education system we know that teachers are extremely busy – I don't know a profession that works harder. I can't see how teachers can move at the pace that is needed without a lot of help. However, a lot of help is sitting all around them; it's a generation of kids that are passionate about learning, whose media is full of

learning – this couldn't be a 'cooler' time to learn. Today's media presents us with a range of options and modes of communication for learning, and therefore the way children expect to learn is changing. When we see people interviewed in sport, we don't just ask 'so how did you feel winning?' anymore, we ask 'how did you get to be as good as you are? Tell us about your regime! Here is a generation steeped in learning that has been learning since birth. It would seem churlish not to engage them in how to learn. What happens when we ask them are three things:

- 1 They have ideas we wouldn't have had. If you ask a few children for their top tips for learning, or how they would like to learn, they will come back with some things you'll never have thought of.
- 2 Students' meta-cognition means they reflect on their own learning and think of themselves as learners. Instead of you needing to instruct them, they look at ways they can solve problems for themselves.
- 3 They see their teacher as a professional to guide them through the process and lead them in the best way for learning. They are looking at learning with that critical eye and can construct their own learning, deconstruct it, and still rely on their teacher as a professional.

These three gains are critical to engagement. I've seen schools in Spain that have transformed their classrooms by putting the kids in charge of how it is organised and how they should learn. They don't have access to an abundance of digital technologies – they've created cardboard iPads and screens – however, they have transformed their learning like never before. I know of a class in West London that actually broke into their classroom in the holidays to study because they didn't want to go home; the learning in the space they had constructed was so seductive. This is as good as it gets. Why would we want to stand in their way? Let them go.



**PHYSICAL SPACE IS CHANGING AS WELL. YOU'VE MENTIONED THESE DIFFERENT STYLE CLASSROOMS. HOW DO YOU SEE THIS CONTINUING TO CHANGE?**

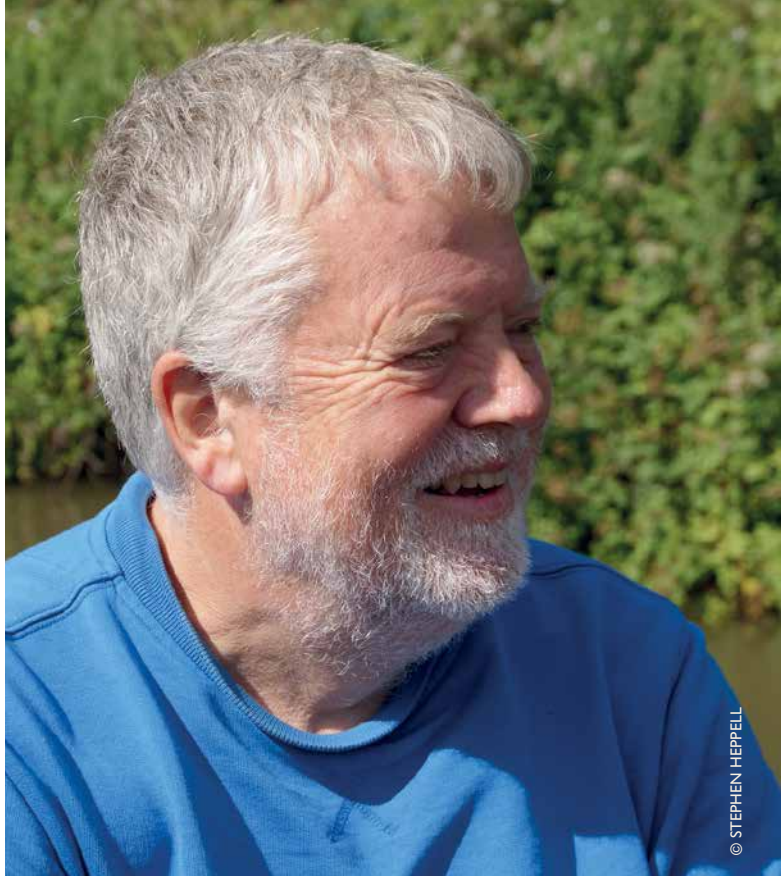
We've moved from the factory model in schools and workplaces (think of a typing pool with rows of people all sitting the same, doing the same thing). That's all gone. When you start looking at the workplace today, you find it's full of collegiality and mutuality. If I go for a job the first thing I'm likely to be asked is 'what are you like as a team player?' They're looking to understand how I work and communicate with others. We also know that these new and collaborative ways of working need appropriate spaces.

We need spaces to work in together, spaces to focus and work by yourself, and we need spaces to sit around a large table in groups. We also need spaces for celebration, and presentation. These are all different spaces – and none of those are like the standard classroom with an uncomfortable chair and uniform desk.

The key is noticing that the world is changing and considering how your space can best be adapted to enhance learning and prepare kids for their future careers. We need to make sure our children have got the capability, confidence and esteem to make their way in the world, and not turn up asking 'what do you want me to do?' but rather taking action themselves.

**WHAT WILL REPLACE THE CURRENT CURRICULUM DEVELOPMENT PROCESS?**

I can't think of a country in the world that isn't absolutely in the middle of a 'curriculum war'. Think of the dismay in Australia to do with teachers and the national model – most of it is to do with misunderstanding. Kids need to know stuff, no doubt about it. On the other hand, they need to be ingenious, collaborative and above all else fascinated and engaged. We call things experiments in science when they're just repeating steps exactly as they're supposed to do them. That's not an experiment, it's a replication; it's not engaging. People reading this will remember their best learning experience – and it was possibly from a slightly eccentric teacher that strayed them off course into something slightly different of interest to them. Or it might have been when a teacher said 'you're not supposed to know this yet, but I'm going to tell you anyway'. It's these electrifying moments of learning that we remember as our best. However, the curriculum doesn't allow enough of those moments. On the other hand, if you throw 'stage not age' at the curriculum and just let kids go as fast as they want, then you get some of that excitement and magic back.



© STEPHEN HEPPELL

**ABOUT STEPHEN HEPPELL**

Professor Stephen Heppell is a leading voice in ICT in learning and is Professor of New Media Environments at the Centre for Excellence in Media Practice at Bournemouth University, UK.

Much of Stephen's work is on-the-ground, practical and project-based. A string of innovative schools around the world are proud to trace their remarkable progress back to his direct involvement.

As well as working directly with schools, Stephen has worked with governments around the world, international agencies and Fortune 500 companies.

**"THE KEY IS NOTICING THAT THE WORLD IS CHANGING AND CONSIDERING HOW YOUR SPACE CAN BEST BE ADAPTED TO ENHANCE LEARNING"**



**THIS AN EXTRACT FROM A VIDEO INTERVIEW WITH STEPHEN HEPPELL. WATCH THE FULL INTERVIEW ONLINE AT: [WWW.YOUTUBE.COM/PEARSONSCHOOLS](http://WWW.YOUTUBE.COM/PEARSONSCHOOLS)**

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# MOOCS: TOO MUCH HYPE OR NOT ENOUGH?

Guest author Dr Jeff Borden talks about Massive Open Online Courses



In late 2013, I attended an eLearning conference in Saudi Arabia where again, the topic of MOOCs came up. But they were discussed very differently at this conference. For the past few years, I have noted that Massive Open Online Courses are the easiest way to get attendance at eLearning conference presentations. About a third of conference sessions talked about MOOCs – mostly from a ‘How You Can Do It’ perspective, although there were always a few asking if we should ‘Believe The Hype?’

But at this conference, it was official – ‘The Hype is Over’. This was stated emphatically by both an American keynote presenter and by the director of eLearning for the main university in the Kingdom. They both noted that MOOCs had been given too much credit out of the gate and that they often took away from the real conversation of eLearning.

MOOC providers would likely disagree, but what about those without a stake in the race? Are MOOCs dying or are they here to stay?

I’ve noted the problems with first generation MOOCs before. Not to labour the point, but we now know that most xMOOCs (meaning those with a broadcast, top-down model vs a ‘cMOOC’ – the ‘c’ stands for constructivistic), are not generally taken for the credit they may offer but for an individual module of content, hence the seriously low completion numbers. More often than not, they are taken by people who already hold degrees. They utilise a peer-to-peer evaluation methodology that has proven quite challenging. After all, how often do you find 10,000 people who are genuinely able to guide the other 90,000 on a difficult or complex topic?

Then there are the logistical issues raised over the past several years that do demand answers. I’m not talking about whether MOOCs can make money – most of the public couldn’t care less about that. I’m talking about how to get credit for a MOOC. Some recent, now famous, quotes talk about getting real college credit for one of the massive courses, while others explain that after the offer was put out, not a single student showed up and received their credit.

## MOOCS TODAY

So, what can we say about MOOCs, v1 today? If MOOCs are here to stay, it’s time to start looking at the next generation to answer some of the tough questions.

For instance, a number of schools are working to crack the \$10,000 Baccalaureate degree. To do so, it is likely that these schools and programs will need to employ the MOOC concept (whether their solutions need to include “massive” courses is yet to be determined). That means using reusable, self-paced, socially networked courses to free up typical administrative or teaching overhead. That means using more machine learning for grading, adaptivity and personalisation.

The next generation MOOC will have to employ more of a feedback loop to the student. Understanding the issues with social learning at scale, most progressive MOOC providers are finding ways to utilise graduate students, or simply more advanced students such as seniors who have already taken a course, to help push conversation and assessment. By seeding courses with large clusters of ‘more knowledgeable others’ (as Vygotsky would call them), providers theorise they can get at the kind of learning communities desired to make a MOOC work at scale.

So, essentially, the next generation of MOOC combines the worlds of the xMOOC and the cMOOC by using computers to do as much simulated instruction and assessment as possible, while making up for communication and community flaws through social construction.

Back to the original question, are MOOCs over-hyped and dying? They seem to have lost their glimmer for many in Higher Education. Like the term 'data' from 2002–07, gone are the days where MOOCs dominate the headlines. But I think education might take a lesson from data here. I still believe that 'big data' holds the key to true personalisation in education. And while a lot of administrators simply got tired of waiting for the smart engines and adaptive software, they are still being worked on and, in fact, are getting better every day. MOOC providers may want to keep their eye on that ball, just as savvy administrators never left the data conversation. Our ideas almost always get out ahead of expectation and ability to implement. We need something to shoot for and a good visionary can be worth their weight in gold! So, I think those educators who continue down the MOOC road will have new opportunities opening up to them. From more globalised student bodies to larger number of graduates to neo-millennial learning mirroring neo-millennial work, the next generation tool still holds promise. But I think the concept will be less experimental and more closely aligned with the best practices we in eLearning have always known.

Perhaps that is the answer. We don't need a new letter in front of a MOOC. Maybe we just need a new name for a MOOC. Something like: eCourse, because at the end of the day, these massive courses may just be another way that any student can learn at any time. The neo-millennial student portfolio may include a course on campus, a traditional eCourse and a massive eCourse too. And they may be taking two for credit and one broken up into badges so as to ... oh wait – that's another story.

Good luck and good teaching.



## ABOUT THE AUTHOR



**Dr Jeff Borden** is the vice-president of Instruction and Academic Strategy at

Pearson International's Learning Technologies Group and leads the Center for Online Learning at Pearson. As an Enriched Lecturer at

Chaminade University and past college administrator, Jeff has assisted faculty, administrators, executives and even politicians in conceptualising and designing eLearning programs globally. Recently Jeff testified before the US Congress' Education Committee, provided keynote addresses at conferences around the world, presented in the NMC Virtual Symposium for the Future, and has

been asked to determine the "Academic Vision" for Pearson Learning Technologies Group.

You can follow Jeff at:

**@bordenj**

**<http://jeffpresents.com>**

**<http://researchnetwork.pearson.com/author/jeffborden>**

**<http://www.pearsonlearningsolutions.com/blog/tag/from-the-desk-of-jeffborden/>**

## Q&A



Each term we ask contributors from the field of education to share their thoughts on topical issues.



### KAYE DE PETRO

#### **CONTENT AND LEARNING SPECIALIST, F-12 ENGLISH AND HUMANITIES, PEARSON AUSTRALIA**

All experiences both positive and negative have informed my role as an educator. My very first experiences of Infant School under the formidable Miss Wolf taught me that fear was not a great motivator for learning. I was inspired by the wonders of learning by one of my first mentors, Mrs MacDonald, who set me on the path to becoming not only a teacher but a teacher-librarian, who could work with students to open their minds to new experiences in a library.

Over the years, as I attended many professional development days, I would continually learn what does and does not work in a classroom. Sometimes I learnt the 'how not to do it' approach from presenters but most often I gained insight through the inspirational programs they would present to us. I have learnt that we all are truly lifelong learners; we are always learning. Therefore, each and every day when I teach, present and write for students, I do the following: reflect back on my learning experiences; place the learner at the centre of that process and let both of these things inform my role as an educator.



### AMY WEST

#### **ENGLISH AND HISTORY TEACHER WITH THREE YEARS' EXPERIENCE TEACHING IN VARIOUS HIGH SCHOOLS ACROSS ALICE SPRINGS**

I admit, I was the goody-two-shoes at school. I once tried to unsuccessfully evade the watchful eye of my German teacher to tie my friend's shoelaces to the desk, and I got into so much trouble that I never rebelled again. However, at university an inner rebellious streak led to me sauntering into lecture halls half an hour late with a latte in one hand, and a notebook in the other (in order to master the art of surreptitiously writing to-do lists and letters to friends whilst looking like I was listening). What changed? I believed the whole world was about me as a learner being entertained by other people. I wanted to watch a comedy show, not a practical lecture on educating children.

But somewhere in between scraping vomit off a McDonalds slide and pulling all-nighters researching in the library, I realised the real world isn't like that – life and learning is hard, and you don't often get entertained. Learning, and teaching, is more often than not about resilience and determination. I tell my students often: 'you will always have to do hard things in life, and most of the time you don't get to do what you want to do'. A lot of education nowadays is student-centred to the extreme – where each lesson must 'entertain the mob'. But kids need more than ever to be taught resilience and determination in a world that constantly tries to shape them to be anything other than who they should be. They need to learn to not give up, and learn how to deal with difficult things. My students can do hard things, and this can have a huge impact on their future lives.

**"I HAVE LEARNT THAT WE ALL ARE TRULY LIFELONG LEARNERS; WE ARE ALWAYS LEARNING."**

Kaye De Petro

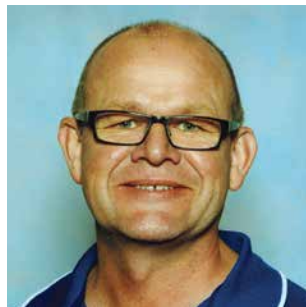
# HOW HAVE YOUR EXPERIENCES AS A LEARNER INFORMED WHAT YOU DO AS AN EDUCATOR?



MICK SULLIVAN

**RETIRED TEACHER WITH 35 YEARS' SERVICE IN VICTORIA RANGING FROM PRIMARY SCHOOLS TO A MOBILE AREA RESOURCE CENTRE AND PRISON EDUCATION**

Starting my primary education in a small suburban school and finishing my secondary education in Melbourne's largest all-male state high school was a steep learning curve. The world of learning transformed from a narrow, enclosed environment to one where the world was an oyster bed full of pearls. This experience taught me that there is never just one way of looking at a problem or doing things. This philosophy saw me through teachers' college, graduate courses of various types, and a few years travelling the world. Each of these experiences, in different ways, changed my world view and modified my methodology as an educator. Even being taken as a hostage in a prison siege by an armed inmate, while working as an education officer, had several learning points. Two of the main ones being always watch the eyes and think fast!



SIMON ANGLE

**CLASSROOM TEACHER AND SCIENCE CO-ORDINATOR, ALBERTON PRIMARY SCHOOL, SOUTH AUSTRALIA**

I was a disengaged learner when I went through school! I left school before I finished year 12, and went to university as a mature age student when I was 30. I completed a Bachelor of Technology in Aquaculture, and really enjoyed the practical aspects of my degree. After I worked as an Aquaculture Technician for a few years, I decided to change career path and completed a postgraduate Bachelor of Education in 2007.

I am an 'active learner', and I think my experiences with different styles of teaching throughout my studies reinforced what I do now with my students – a lot of active learning, concrete examples, but also mixing up my teaching strategies to cater for different styles of learners! Entering teaching via a non-traditional path has also meant that my other life experiences inform my approach to teaching and learning. I work in a great school that has a lot of innovative programs and that helps students who are having troubles in their school lives to re-engage with their learning.



ROB SIEBEN

**DIRECTOR, ICT AT PRINCE ALFRED COLLEGE, ADELAIDE**

As a child, I saw the advent of television and saw teachers begin to use it in the classroom. Later, I saw overhead projectors, then video recordings and later still, PowerPoint all become part of a teacher's toolkit. The intention was to try and engage with students, as should always be at the heart of good teaching. I don't suggest this means we should always use devices and technology to teach, but I certainly think that we should ask whether what we are doing is engaging the students and enhancing the educational outcome. If the answer is yes, embrace it, but if not, why do it? That question shapes my work today.

# 21ST CENTURY LEARNING SKILLS

Guest author Rob Sieben demystifies the jargon



Sir Ken Robinson says we don't need to transform teaching and learning, we need a revolution!

Marc Prensky says teachers need to be brave and encourage their colleagues to be brave, too.

So why are these commentators up in arms over the state of education, and agitating for dramatic change? What does it mean to prepare our students for the 21st century and does that actually mean that we need a revolution?

The 3Rs are globally recognised, but now seem to have been subsumed or replaced by 21st century jargon. Some sites talk about the 3Cs: Collaboration, Communication and Co-operation; some the 4Cs: Critical thinking and problem solving, Communication, Collaboration, and Creativity and innovation; and yet others the 3Ps: Play, Passion and Purpose.

As teachers we have been trained to appreciate that our students learn in different ways and in response to different stimuli. Left brain, right brain, auditory, visual and kinaesthetic are all terms we should recognise. Appropriate use of ICTs can provide stimulation that utilises all of

these and as such we should embrace them as valuable teaching and learning tools. But simply using computers in our classes is not enough to prepare our students for the 21st century. If we are to use computers in our classes, we should be looking to use them not simply to do better what we have always done, but rather to embrace new theories of learning and move away from the traditional teacher-centred pedagogy to the learner-centred methodologies. Whilst the use of ICTs is not mandated by such a paradigm change, it is certainly true that many of these “learner-centred” methodologies are enabled by ICTs.

## FLIPPING CLASSES

Those who watch TED talks will almost certainly have come across TED's *Lessons Worth Sharing* and the reference to flips and flipping classes.

Flipping a class means reversing that which would traditionally be done in class and that which would normally be done at home as 'homework'. Flipping classes has tremendous potential, not because it is transformational or revolutionary but because research tells us that when students have one-to-one access to ICT,

the majority of time that that computer is used for learning will not take place in the classroom or even during the school day, but rather outside of school.

English and Humanities teachers have been flipping classes for years, setting the students to read texts outside of class so that the time spent in class can be dedicated to constructive conversation and exercises. Why then is flipping a class seen as transformational; because suddenly the maths and science teachers can do what the humanities teachers have been able to do for years, and all of us can use the available technologies to make the home-based activities more engaging to the students. Through the use of video and interactive technologies we can tap into the students' world in ways that were impossible only a few years ago. It is not the flipping of the class that is new; it is what we can do when we flip the class that is new.

## BLENDED LEARNING

Blended learning is the integration of multiple learning environments. Again, it is not new but it is gaining increasing attention because the availability of mobile

**Don't be intimidated by the jargon of 21st century teaching and learning. We can transform our teaching by focussing more on why we do what we do.**

**If you are going to teach 21st century skills, make sure you know what that means and how you will measure success.**

**Be excited about the possibilities. The challenge to engage with our students and motivate them is not new; but if we succeed, the results will be amazing.**



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technologies allows the use of ICTs to play a greater role than in the past.

Blended learning for blended learning's sake (in other words, so that we can say we incorporate computer-based activities in our classrooms) is not enough. Unless we can be sure that we will enhance the learning outcome, there is little or no justification for employing any computer-based activity. Just because we can, doesn't mean we should. We need to ask 'why?' before deciding 'what?'

### UNIVERSAL DESIGN FOR LEARNING

UDL (Universal Design for Learning) is another of the projects advocating for pedagogical change. The UDL model advocates employing:

- *multiple* means of representation to give learners various ways of acquiring information and knowledge,
- *multiple* means of expression to provide learners alternatives for demonstrating what they know and
- *multiple* means of engagement to tap into learners' interests, challenge them appropriately, and motivate them to learn.

The exponential growth in the number of ways that we can engage with our students is exciting, but what sets UDL apart from other models is the reference to 'multiple means of expression'. UDL encourages us to apply the same rubric to how we ask students to demonstrate their knowledge as we do to any other teaching and learning activity. Let's ask, why are we conducting the activity? Is it to ascertain whether our students have acquired a skill or some knowledge? If so, is it important how they demonstrate this to us or simply that they demonstrate this to us? I'm not arguing that a

written assessment task (exam or test) has no place in this process, but I don't think it should be the only assessment tool we employ.

Why not allow students to choose how they will demonstrate that they have learned the subject matter or acquired a necessary skill? The only question that needs to be asked is: will the mode of communication chosen allow the student to demonstrate his or her knowledge? Ask why you are setting the task, and be less concerned about what the task is!



### ABOUT THE AUTHOR

**Rob Sieben** has held a number of administrative positions in a career spanning over thirty years in education. Curriculum delivery, accountability and educational administration have, in all his roles, been at the heart of his work. He has also worked within the ICT industry, but still primarily with involvement in education as a consultant in matters of curriculum delivery and school network infrastructure. He has contributed nationally to the understanding of ICT in schools, presenting at the Expanding Learning Horizons national conference. He is currently the Director, ICT at Prince Alfred College in Adelaide.

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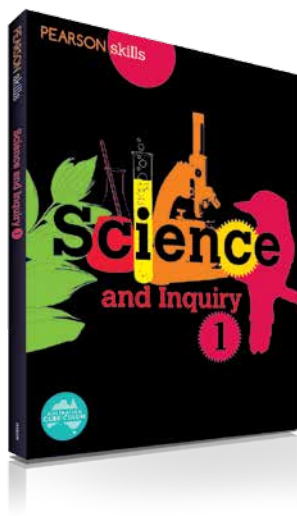
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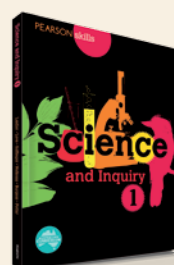
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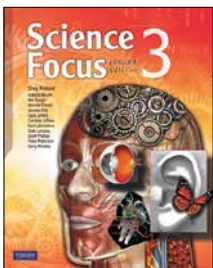
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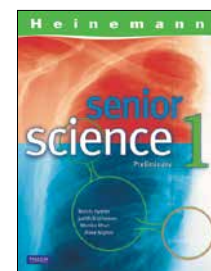
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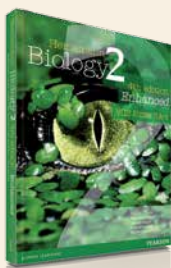
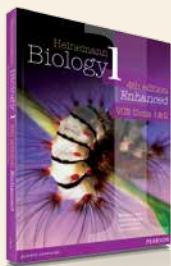
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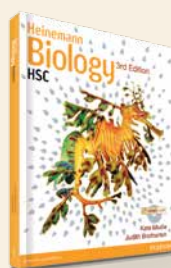
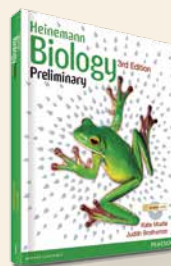
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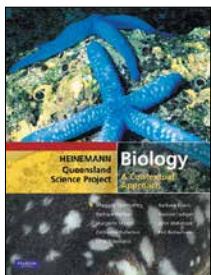
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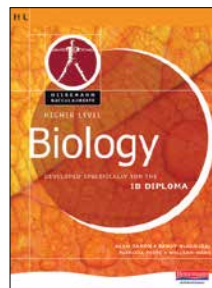
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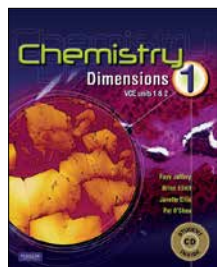
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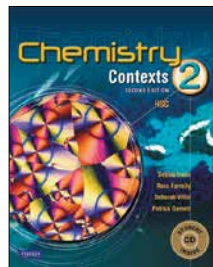
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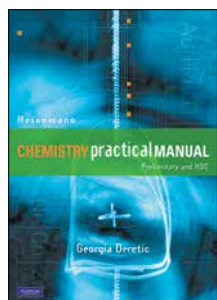
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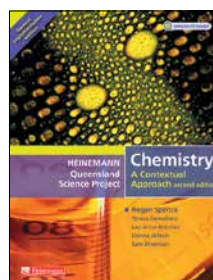
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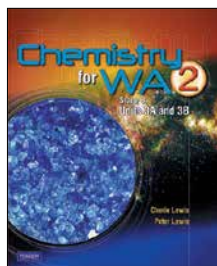
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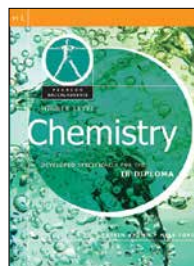
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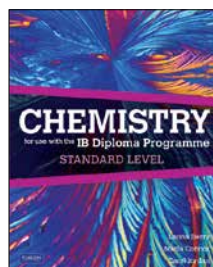
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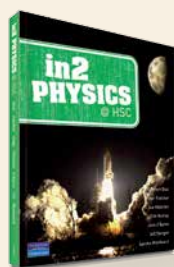
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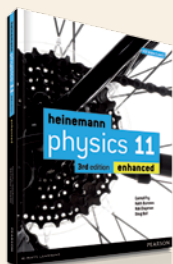
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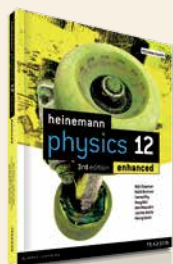
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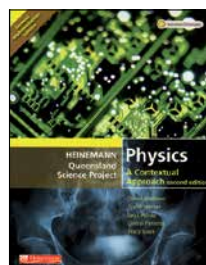
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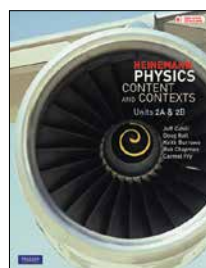
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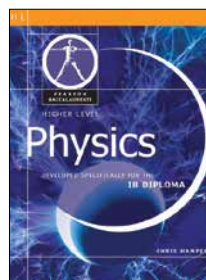
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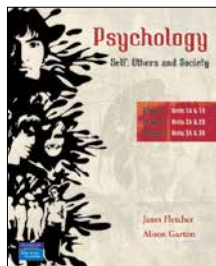


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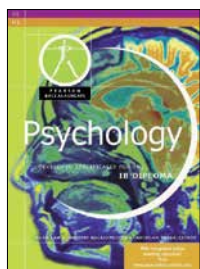
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# PUZZLES



## 01

### SUDOKU

Difficulty: Medium

	4		2				5	
		9	4	1			3	8
		7				2		
6			1	2			9	
3				5				1
	9			8	4			3
		8				3		
4	2			7	6	1		
	6				1		7	

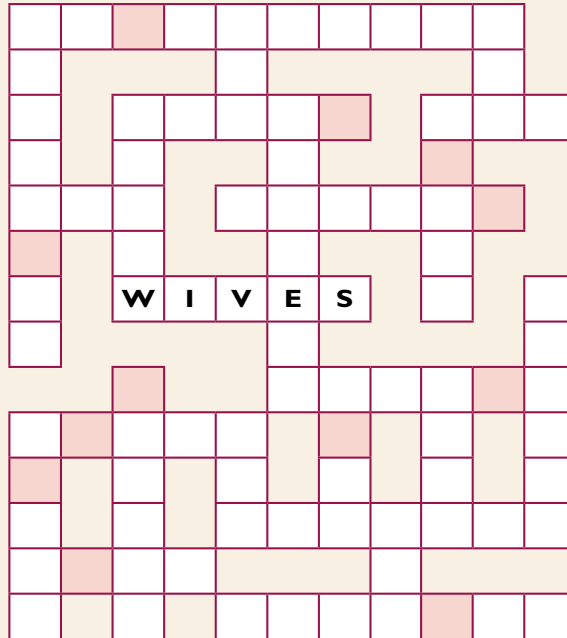
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## 02

### CRISS-CROSSWORD

Use the letters in the starter word as clues to fit the rest of the words into the criss-crossword!

Then unjumble the highlighted letters to discover the hidden phrase.



#### 3 Letters

AND      SPY  
RIP      TAR  
SAP      EAT

#### 4 Letters

BEAM  
LOOK  
YOUR

#### 5 Letters

ARROW      STAIR  
AZTEC      SHAVE  
SKULL      ~~WIVES~~

#### 6 Letters

BALLOT      SPIRAL  
MELTED      SYMBOL

#### 7 Letters

EXPRESS  
PYRAMID  
WILDCAT

#### 8 Letters

MOUNTAIN

#### 10 Letters

MYSTERIOUS

## 03

### LOGIC PUZZLE

Five siblings attend the same school. Use the clues to find each child's favourite teacher, year level and best subject.

#### CLUES

- Charlie is three years ahead of Greg.
- History and French are not taught in Year 1.
- The English student is in a higher grade than Mr Wilson teaches.
- Alison is the oldest in the family.
- Mrs Brown does not teach Science.
- Charlie addresses his favourite teacher as Monsieur.
- The top Science student is in a higher grade than the top History student.
- Greg's best subject is history with Mr Smith.
- Susan's best subject is Maths with Miss Sullivan.
- The top English student is in a grade three below that of the top Science student.

	Mrs Brown	Mr Smith	Miss Jones	Mr Wilson	Miss Sullivan	Year 1	Year 4	Year 7	Year 9	Year 12	English	Maths	Science	History	French
Alison															
Charlie															
Emily															
Greg															
Susan															
English															
Maths															
Science															
History															
French															
Year 1															
Year 4															
Year 7															
Year 9															
Year 12															

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