



## **In this issue of the DATTA Vic newsletter:**

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## Welcome from the President

A recent episode of *Four Corners* ([Monday 4 July 2016 - Future Proof](#)) highlighted some startling and credible predictions that more than five million Australian jobs will disappear in the next 15 years, as a result of new technology. That's 40% of the jobs that exist in Australia today.

Many of the jobs our students will do haven't been invented yet. And if parents believe that steering their kids towards "safe" professions like accountancy will guarantee them a job, they're in for a shock.

*"Machine learning and artificial intelligence in particular are actually solving jobs that we thought traditionally were very highly qualified jobs, people like lawyers and doctors and accountants and bankers... It's eating out the middle of the job market."* **Robotics Pioneer – source ABC**

There will be winners and losers in some surprising areas as more and more jobs become automated or operated by intelligent computers.

*"What's happening is the same thing that happened to blue collar work in the seventies, eighties and nineties is going to happen to white collar work... People need to start understanding the impact that it's going to have on them."* **Management Consultant – source ABC**

Schools and universities are churning out students with qualifications for jobs that won't exist, instead of training them for the ones that will be created.

*"We've had incredible education in this country, but there is no-one that genuinely really thinks it's fit for purpose now and into the future... Australia is, right now, not prepared."* **Youth Advocate – source ABC**



I encourage you to watch this programme (available [HERE](#) till 3 Aug) and you will notice an assumption that coding is the answer to future problems – that is until the end. The climax of this provocative and insightful look at education is students developing products and services for real world scenarios. In other words, the solution may well be Design and Technology related subjects.

There is no better learning area than Design and Technology for developing creative problem solvers where students manage their own projects and take charge of their own learning. We are far better placed to deliver integrated STEM projects than other school faculties and this is an area that has significant importance now with a push from all areas including government and private sectors.

Our opportunities are in stark contrast to the reality in many areas. In another Australian state, Design and Technology will not be offered as a separate subject in the near future – instead it will be rolled into one subject with others.

In short we find ourselves at a significant moment where we can continue to evolve and become a core subject for developing the creative problem solvers that Australia and the rest of the world will need, or we face the alternative - extinction.

I hope that you are all able to wholeheartedly grasp the opportunity presented to you by our first state [Design and Technology Week](#). Get on the website, sign up, plan events for your whole school. Be disruptive, be loud and, most importantly, ensure that we are recognised as critically relevant to education in the 21<sup>st</sup> Century. Oh, and have fun!



## News from the VCAA

### Consultation register for VCE reviews

VCE Product Design and Technology is currently going through a review process and will be available for consultation in mid-August. Teachers are encouraged to join the [VCAA Consultation Register](#) for this VCE study to receive email notification once the consultation draft is available.

*Leanne Compton*  
Curriculum Manager, Design and Technologies

## DATTA Vic - New Staff & New Offices!



After months of planning, DATTA Vic has finally moved! We are delighted to be at our new home at the Dream Factory in Footscray, and are looking forward to welcoming all of our members to this fantastic building!



We're also excited to let you know that the DATTA Vic team has a new member of staff. In order to better serve our members, the committee have created the post of Admin & Membership Officer, which will be filled by Hannah Lewincamp - many of you will already have met her at our conferences.

Hannah (*pictured right*) will work Thursdays & Fridays, and can be contacted on [admin@datta.vic.edu.au](mailto:admin@datta.vic.edu.au).

Davone Pope (*pictured left*) will be looking after all things financial as DATTA Vic Finance Officer. (Tuesdays & Wednesdays, [finance@datta.vic.edu.au](mailto:finance@datta.vic.edu.au)).

Laura Murphy (*pictured middle*) is still the Executive Education Offer ([pl@datta.vic.edu.au](mailto:pl@datta.vic.edu.au), Monday - Friday).

## The Conference Recap



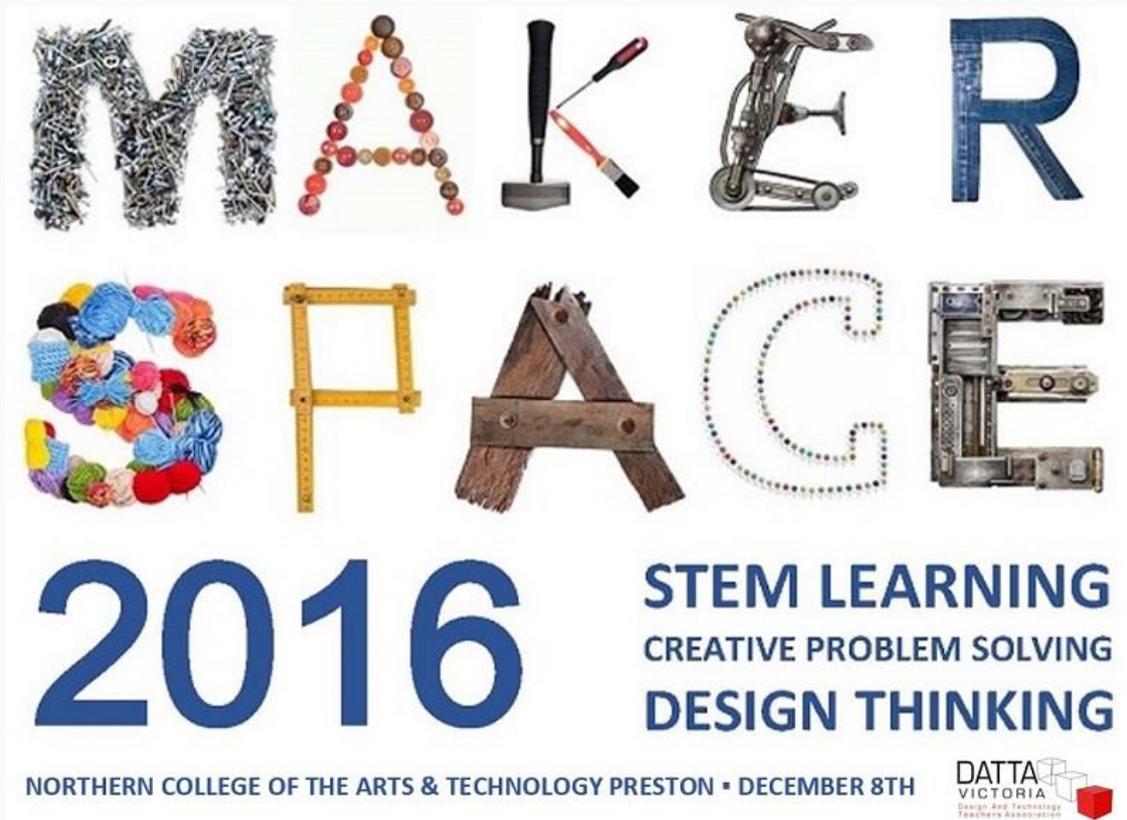
Thanks to everyone who came along to our [STEAMPunk Conference](#) on the 13th & 14th of May at Harvester Technical College and made it a very special event.

We had inspiring keynote speakers, over 50 exciting workshops, 2 student competitions, a wide variety of trade exhibitors, award-winning teachers, and much, much more! To see photographs from the event, click [HERE](#). (Note we're adding more as we get them - make sure you like us on *Facebook* to see more!)



And our members can log in to the [DATTA Vic website](#) to download a range of presentations from the two days. If you need help logging on, contact Hannah at [admin@datta.vic.edu.au](mailto:admin@datta.vic.edu.au).

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Now that *STEAMPunk* is over, DATTA Vic is turning our attention to our December conference - no rest for the wicked! We're delighted to announce [Makerspace 2016](#), which will take place at NCAT on the 8th of December. We'll be focusing on STEM learning & teaching, creative problem solving and design thinking, as well as the joy of making!

If you're interested in presenting a workshop at *Makerspace 2016*, we'd love to have you! Just complete the application form [HERE](#) and we'll be in touch.

## The DATTA Aus Conference - Creating Context for Learning in Technology Education



Applications for presentations at the [3rd National DATTA Conference](#) to be held at the University of South Australia Dec1-3rd 2016 are now being called for.

With the National Curriculum at the stage that it is, this is a great opportunity to showcase the innovative work you are doing in your school, your region and your state and share ideas with your interstate and international colleagues.

For more information, click [HERE](#) or contact Larry Spry on [Larry.spry@unisa.edu.au](mailto:Larry.spry@unisa.edu.au).

# Professional Learning in Term 3



DATTA Vic has a VERY busy term ahead! Click on the links below for more information on our forthcoming professional learning and student workshops:

**CREO 2.0 CAD Training for Teachers** 13th & 14th July, Billanook College. Click [HERE](#)

**Break Down the New Design & Technology Curriculum with DATTA ViC;**

18th July, Swinburne University. Click [HERE](#) and;

25th July, Discovery Science & Technology Centre, Bendigo Click [HERE](#)

**VCE Systems Engineering Units 2 & 4**

21st July, Caroline Chisolm Catholic College. Click [HERE](#)

**OH&S in the Technology Classroom**

29th July, The Dream Factory Footscray. Click [HERE](#)

**Dovetail Boxes with Giffkin Jigs**

6th August, Flinders Christian Community College. Click [HERE](#)

**10 STEAM Models to run from a Picaxe Microcontroller**

27th August, Diamond Valley College. Click [HERE](#)



We're also finalising details for several other teacher and student sessions towards the end of term, including;

**The Big Wool Day Out 2016!**, National Wool Museum (Late August - details coming soon)

**VCE PD&T Exam Prep for teachers and students** (various locations throughout Victoria)

**VCE Systems Engineering Exam Prep for Teachers** (Melbourne Metro)

Check our [website](#) for details.



And we're really excited to announce details of a partnership project with [Environmental Education Victoria](#). On the 6th of September at NGV, we'll be working together to deliver **STEAM & Sustainability** - a professional learning workshop for primary teachers.

Participants will ;

- discover how to address sustainability across the curriculum
- explore the new Design & Technology Curriculum and focus on teaching STEAM & Sustainability
- discover sustainable design with [NGV](#)
- participate in a hands-on [Trash Puppets](#) workshop, giving great ideas for successful classroom projects

We'll be emailing out details of this workshop soon, so keep an eye on your inbox!

We're also putting the finishing touches to our **Special Members' Evening & AGM** at the end of September. Last year we held it at Swinburne School of Design, where we enjoyed a presentation from the Dean, Scott Thompson-Whiteside. This year, we're delighted to announce that [Engineers Australia](#) will host our event at their amazing Bourke Street home. We'll have a keynote from one of the brightest minds from the design & engineering sector discussing how to engage young people in STEM, as well as wine and nibbles - for us to say thank you for your support! Details are coming soon!

For more information, contact Laura at [pl@datta.vic.edu.au](mailto:pl@datta.vic.edu.au)

## Professional Learning Term 2 - Recap



Thanks to everyone who participated in DATTA Vic's Term 2 Professional Learning program - it was a really successful couple of months!

Our **STEM Brainstorming Day** (pictured) brought together primary and secondary teachers from a range of learning areas at our new offices at The Dream Factory in Footscray! But don't be fooled by this image - it may look like we were merely enjoying the sun on the terrace, but everyone was hard at work identifying future STEM programs and benchmarking them against the Science, Maths and Technologies Curricula. Thanks to you all for a great day!



We also had a fantastic day at **The New Technologies Curriculum for Primary Teachers** workshop on the 28th of April at Melbourne Museum -

a partnership project with [Digital Learning & Teaching Victoria](#) and [Home Economics Victoria](#). As well as an in-depth exploration of the new curriculum, participants took away ideas for implementation in their schools, and, thanks to [Scienceworks](#) and [Discovery Bendigo](#), a wealth of ideas for classroom projects.

Members can download the presentations from the day [HERE](#). Contact Hannah at [admin@datta.vic.edu.au](mailto:admin@datta.vic.edu.au) for help with logging-on.

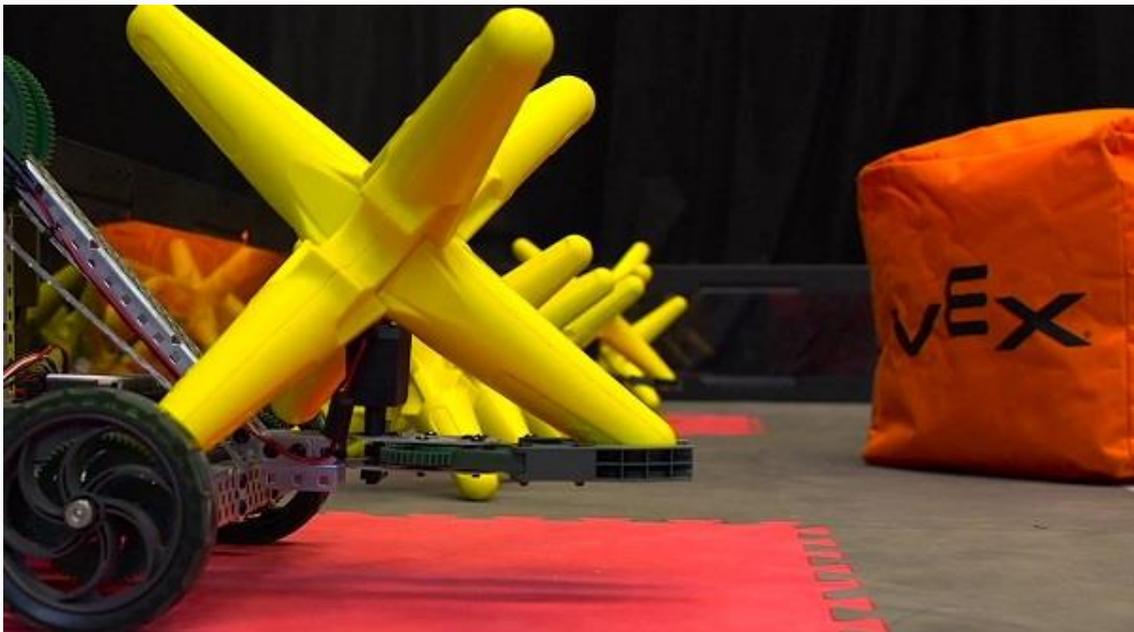
We also ran sessions on VCE PD&T Units 2 & 4, and our Introduction to VEX Robotics, supported generously by Autodesk.

Another highlight was **Pinball Machines - a Versatile Model for Teaching Design Creativity & Technology**, (pictured) run by Ben McKenzie on the 2nd of May at Camperdown College. One participant described it as "easily the best PD I have ever been to!" To read Ben's recap of the workshop, click [HERE](#). Thanks again Ben - hope you can run more workshops for us in the future!



Kirsten Gibson & Marko Wakim with their Pinball Machines

## VEX Robotics News



DATTA Victoria is ready for a great season of **VEX Robotics**. For this year's tournaments students will be designing robots that can pick up large stars and bean bags, then launch them over a 900mm wall. As an additional challenge the robot can hang on a 1m high pole for extra points. This game provides students with interesting and engaging design challenges. One of the great things with VEX robotics is throughout the course of the year as students compete at a verity of tournaments their designs and strategies evolve. By the

time teams get to the Australian Nationals on December 3rd they will have refined robots that barley have a resemblance to their early season designs. As a coach it is a great experience seeing the deep learning that occurs over the course of a season. Already we are seeing some unique design solutions from teams across Victoria and Australia.

The first major Australian tournament will be held at Camberwell High School on August 16th. At least 15 of the top robotics teams from around Melbourne will compete. This event will be open to the public, so if you are interested in seeing students engaged in competitive robotics feel free to come and see. We will have several additional tournaments throughout the year: Highvale College in September, Camberwell High School in October and Emmaus College in November. The National Championships will be the largest event of the year with students from across Australia, and we are pleased to be hosting it at Galen Catholic College in Wangaratta.

If you are interested in **VEX Robotics** please contact Laura at [pl@datta.vic.edu.au](mailto:pl@datta.vic.edu.au)

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