

The DATTA Vic Newsletter Term 1 2018



Pictured: D&T Classroom Projects for Years 7-10, 8th March at Ballarat Tech School

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Welcome from the President

It has been a busy term one. I am sure most of us were relieved to get a little bit of down time over the mid-semester break.

Top Designs opened in March, showcasing a diverse range of products and garments. Congratulations to those students whose work was selected or shortlisted. Teachers of VCE Product Design and Systems Engineering know all about the challenges involved in teaching these subjects.

In PD&T, students need to develop drawing skills, know how to correctly and safely use tools and machinery, and apply production processes that can be very complex, as well as select and test suitable materials.

Systems Engineering students require innovative problem solving skills along with deep knowledge of integrated mechanical and electro-technological engineered systems.

Often the time and the resources available to us can mean we are thinking on our feet and looking for quick solutions to ensure students can achieve the folio and production requirements.

After seeing the range of high-quality work which students have produced for Top Designs, what stood out for me was the diversity of the products, garments, materials and production processes used. Design-led thinking and creative problem-solving encourage students to think more broadly, and the range of items on display demonstrate that this is happening in our classrooms.



While Top Designs showcases a few elite products and garments, I am reminded of all the great work that our students are doing each day in our schools across Victoria. We see time and time again students are producing work that we know is an accomplishment for them. And that's what truly makes a teacher's day.



To support our members, DATTA Vic has an exciting range of events coming up for teachers. We're delighted that registrations for our mid year conference [PERSONAL LOCAL GLOBAL Creative Problem Solving](#) are now open. It's on the 18th May at Harvester Technical College.

We also have a number of fantastic PL days, including **The New VCE PD&T Units 2 & 4** on the 4th June, an **All- Day Intensive on VEX Robotics** on the 4th of June, **How to Make an Interactive Digital Portfolio for Systems Engineering** on the 18th June and **The Big Wool Day Out - Science & Sustainability in Textiles** on the 21st June. For more information on these, read on, or check out our [Professional Learning](#) pages on the DATTA Vic website.

And don't forget - Design & Technology Week 2018 will run as a national event again from the 15th – 21st October. We'll be sending out more details soon, and you can check out the [DATTA Australia website](#) for all the latest news.

Joanne Heide

President, Design and Technology Teachers' Association Victoria



News from the VCAA

Top Designs

The Top Designs 2018 exhibition is now open at the Melbourne Museum, Carlton and closes on Sunday 15 July 2018.

Top Designs forums for both resistant and non-resistant materials feature an introductory talk from a VCAA representative addressing the School-assessed Task using examples from Top Designs exhibited works, folios and design plans. This is then followed by a presentation by an industry professional, who represents best practice within their particular field of design. There are two sessions each day. Details of the dates and times are provided below.

Non-resistant materials	Thursday 26 April	9.45am & 11.45am
Non-resistant materials	Friday 11 May	9.45am & 11.45am
Resistant materials	Tuesday 27 March	9.45am & 11.45am
Resistant materials	Monday 7 May	9.45am & 11.45am
Resistant materials	Thursday 17 May	9.45am & 11.45am
State Reviewer	Friday 18 May	1.45pm

In addition there is a Top Designs Talk on Monday 18 May at 11:45 am which consist of a half-hour talk from VCAA representative. These presentations address the School-Assessed Task and highlight documentation of the task using examples from exhibited works, folios and design plans.

For further details and bookings, click [HERE](#).



Assessment cycles

Product Design & Technology now has two assessment cycles for the School-assessed Task. Specific details are provided on VASS, and schools need to set internal dates in order to meet the June and November reporting cycles.

Systems Engineering will have one assessment cycle (November) this year for the School-assessed Task but there will be two assessment cycles for the revised study in 2019. These details are published in the Important Administrative Dates and are available on [VASS](#).

Revised study design for Systems Engineering

The revised study design for VCE Systems Engineering will be implemented in 2019; the revised study design has been published on the [study page](#).

Leanne Compton

VCAA Curriculum Manager, Design and Technologies

The DATTA Vic Mid-Year Conference

Bookings Now Open!



We're delighted to announce that bookings for our annual mid-year conference are now open! **PERSONAL LOCAL GLOBAL Creative Problem Solving** will take place on the 18th May at Harvester Technical College in Sunshine, and will explore how we can help our students develop an understanding of social & environmental issues and respond creatively to design challenges using their skills and new technologies.

We have a fantastic range of workshops lined up, including;

- *Creative Digital Solutions to Real World Engineering Problems
- *Solving Personal, Local & Global Problems in VCE PD&T
- *Teaching Coding, Electronics & Wearable Technologies
- *Unpicking Initiative - STEM in Textiles
- *Leading STEM

- *Developing Practical D&T Sessions for Primary
- *The Benefits of Lasers in Education
- *Balloon Jousting - Rapid Prototyping Robots in the Classroom
- *Introduction to 3D Printing & Tinkercad
- *Eco-printing our way to a More Sustainable Future

And check out this article, **Solar Powered 3D Printing Aids Solomon Islands Relief** - it charts the work of Dr Mazher Mohammed from Deakin University, and he'll be talking about this in his session ***Eco Printing our way to a More Sustainable Future.***





You can download the conference program and access the booking form [HERE](#). Make sure you register soon to get your first choice of workshops - bookings are already flooding in, and several of our sessions are filling up already! Can't wait to see you there!

And just a reminder of our other major conference event for 2018 - from the **6th - 8th of December 2018**, we'll be hosting, along with Swinburne University, [Design Led Innovation](#), the national DATTA Aus & DATTA Research Conference.



With delegates from throughout Australia and beyond from the primary, secondary and tertiary sectors, this is one for D&T educators not to miss!

We have keynotes programmed from;

- [Dr Eva Hartell](#) from the KTH Royal Institute of Technology in Stockholm
- Archaeologist with Heritage Victoria and Darug Woman, [Maddison Miller](#)
- [Associate Professor Kurt Seeman](#) from Swinburne University
- UNEP Champion of the Earth [Dr Leyla Acaroglu](#)

We'll be putting out a call for workshop presenters for this 3-day major event soon, so if you have an idea for a session, contact Laura at pl@datta.vic.edu.au.

So You Think You Can Design - Textiles 2018



Registrations are now open for our annual student competition, **[So You Think You Can Design - Textiles](#)**. But hurry - entries must be in by Monday 30th May!

Sign your school up now - You can work with as many students as you like in class, and then you should submit 2 winners to DATTA Vic. They have the chance to compete as a team live at the SYTYCD finals at the DATTA Vic annual conference on the 18th of May in Sunshine, and the winners will each receive a **[Bernina 215 Sewing Machine!](#)**



It's a great way to engage your students in the design process, and promote Textiles to your wider school community. Taking part is easy - simply email Laura at pl@datta.vic.edu.au to register your school. You'll then be sent permission slips, which we'll require for your students if they get through to the finals.

Then click **[HERE](#)** for the FAQ's, including the Design Challenges you'll be running and information on the final. Good luck!

Thanks to our sponsors for their generous support for this program:

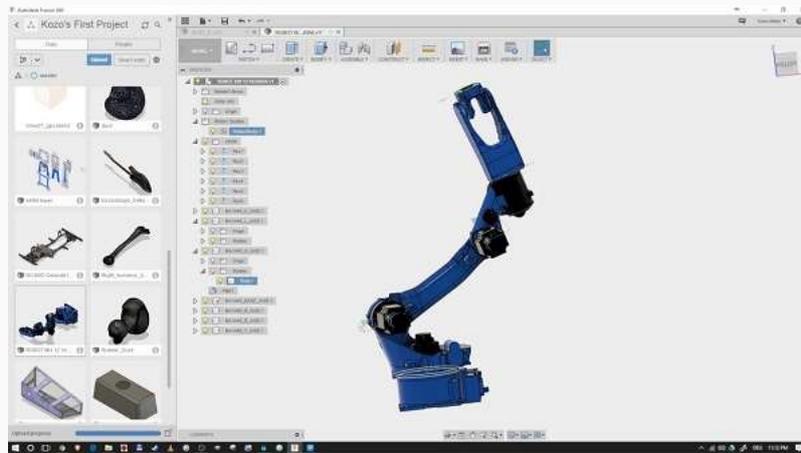
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DESIGN COMPETITION

Professional Learning from DATTA Vic

DATTA Vic has a wide range of teacher professional learning opportunities throughout term 2. See a selection of our events below - click on the links for more information and to book. Full details of our professional learning calendar can be found [HERE](#). We have more workshops coming online, so make sure you check back regularly!

Fusion 360



Thursday 31st May, The Dream Factory, Footscray

This workshop will introduce teachers to designing in Fusion 360, and will cover basic 3D Modelling techniques that could be easily adapted to a year 6 - 12 design program. Participants will also be designing and exporting a complex project for laser cutting. Click [HERE](#) for details.

The New VCE PD&T Units 2 & 4



VEX Robotics All-Day Intensive



Monday 4th June
The Dream Factory, Footscray

Join Jill Livett at the Dream Factory for all you need to know about **The New VCE PD&T Units 2 & 4**. This workshop will cover information on relevant changes to the study design, implementation strategies and addressing sustainability. Click [HERE](#) for more information and to register.

Monday 4th June
Bundoora Secondary College

Learn about VEX mechatronic systems, coding solutions, curriculum and competitions. Explore how VEX can fit in to any STEM classroom from year 6 science all the way up to VCE, and stay back after the PL to take part in Bundoora Secondary College's after-school robotics night. For more details and to book, click [HERE](#).

How to Make an Interactive Digital Portfolio for Systems Engineering



Monday 18th June
Caroline Chisolm Catholic College

Join Colin Chapman for this hands-on workshop for Systems Engineering teachers focusing on the creation of interactive digital portfolios. Click [HERE](#) to register. Colin will also be running a workshop in Term 2 on VCE Systems Engineering Units 2 & 4 - DATTA Vic will be sending out details of this session very soon.

The Big Wool Day Out - Science & Sustainability in Textiles



Thursday 21st June
The National Wool Museum

How can textiles keep sailors warm, protect motorcyclists, stop bullets and tell us if we have the flu? What sustainability strategies can our students follow in the classroom? What are some great ideas for up-cycling? These are just some of the topics you'll find out about at the Big Wool Day Out 2018! Click [HERE](#) to register.

DATTA Vic in Regional Victoria



DATTA Vic is committed to supporting all our members throughout Victoria - which means we run a range of workshops in rural and regional areas.

Last term, we teamed up with Ballarat Tech School to run a full day session on [D&T Projects for Years 7-10](#), where we were lucky enough to meet [Nao](#), the autonomous humanoid robot! (pictured above)



We also had our first ever meeting of the [North East Region D&T Group](#), when we came together at Victory Lutheran College in Wodonga to meet the VEX Robots and talk about shared ideas and issues. Thanks to everyone who participated. We're working on the next meeting in term 2, so watch this space!

And the South West D&T Group is catching up once again on the 17th April at Deakin University in Warrnambool. Participants will meet with staff from the Faculty of Engineering and discover the STEM programs they run. For more information and to book, click [HERE](#).

Wanted by Engineers Without Borders - Teacher Partners! Amazing Opportunities for D&T Educators



EWB is a community development and education not-for-profit working in Australia, Asia and the Pacific. Their vision is that everyone has access to the engineering knowledge and resources required to lead a life of opportunity, free from poverty. They do this by developing skills, knowledge and appropriate engineering solutions. EWB's Education and Research team supports delivery of a range of community-centred education programs, including the School Outreach Program, facilitating hands-on STEM workshops for primary and high school students.

EWB are seeking Design & Technologies teachers to become involved in two exciting programs;

Wanted - Integrated STEM Curriculum Resource Reviewers

EWB is seeking secondary school educators to review their curriculum content. Please email school.outreach@ewb.org.au with subject line "EOI: Curriculum Reviewer" by the **30th April** to register your interest.



Required commitment:

- 2 hr workshop (via teleconference) 4-6 pm . Goal of workshop will to be to provide input to the proposed engagement approach of the curriculum resources, effectiveness of curriculum content coverage and content coverage.
- 2-4 hr workshop to review resource portal (including curriculum content and assessment resources), answer specific questions and provide other feedback.

About the curriculum Resources:

- Curriculum resources are based on real-world, community-centred contexts developed from EWB's work in international development.
- Students will explore the context through a project-based, student-directed learning approach.
- Students will develop understanding of engineering and STEM as a tool for community empowerment.
- Curriculum resources will be appropriate for delivery to students studying Levels 7-10 of the Victorian curriculum.

Wanted: Teachers to partner with EWB to bring real-world, Humanitarian STEM Curriculum Resources to their year 7-10 classes



EWB is seeking secondary school educators to work with them to deliver a Victorian-curriculum linked, project-based learning module based on a real-world community context. Participants will explore energy, water, IT, sanitation, waste and sustainable infrastructure.

Students will be invited to explore the community, learn about the challenges and opportunities, develop, test and iterate designs and models and pitch their ideas. The best ideas may be eligible to enter the next development phase and adopted by the community.

These programs will run over Terms 2 & 3, and are free for participating schools. Please email school.outreach@ewb.org.au with subject line "**EOI: EWB STEM Curriculum**" by the 30th April to register your interest. Places are limited so please register quickly.

Tech School News

Banyule Nillumbik and Whittlesea Teach Schools



Tech Schools are part of the Victorian Government's commitment to create the Education State, preparing Victoria's young people with skills that industry needs and knowledge to build careers and create jobs. DATTA Vic is delighted to be involved in the Tech Schools Learning Advisory Panel, and is excited to work with our partners to develop professional learning opportunities for teachers.

For this newsletter, we've asked Marc Blanks, the Director of Banyule Nillumbik and Whittlesea Teach Schools to give us an update on their work.

Click [HERE](#) to read more about their innovative building design and program development, their Chat-Bot-Filmathon and their recent Maker Faire.

For more information on Victoria's Tech School initiative, click [HERE](#).

University News

Our Award-Winning Graduate Teachers from Deakin University



DATTA Vic is proud each year to offer several awards to the most outstanding students from Deakin University's *Bachelor of Education (Primary)* in the Technology Education Unit.

And we're delighted to say that at ceremonies on the 19th Feb in Geelong and on the 1st Mach at Warrnambool, our top students came together with our award-winning teachers!

Pictured above are Gemma Borgwardt (left) and Jana Hanafie (centre) receiving their awards from Christopher Hudson, (DATTA Vic's *New to Teaching* Winner for 2017) and Jacob Gellert (right) being presented with his certificate by Ben McKenzie, the recipient of our *Foster Adem Leadership in Education Award* and DATTA Australia's *Teacher of the Year* for 2017. Congratulations also to Charmine Thorne (not pictured), who received the DATTA Vic award for most outstanding Bachelor of Education student from Deakin's Institute of Koorie Education.

VCE Connect at Swinburne University



VCE Connect is an individualised year 11 & 12 senior qualification with a strong focus on STEM (Science, Technology, Engineering and Maths). It offers both ATAR and non-ATAR pathways with the opportunity to study VET and VCAL as well as VCE. They also offer local schools the opportunity have students complete “hard to fill” single VCE subjects while remaining at their home school.

VCE Connect provides VCE as an individualised program designed for student needs rather than a “siloed” approach to VCE where students have limited options. They offer students access to 15 different VETiS programs with state of the art facilities. The program is committed to the STEM model of learning with students having access to the best Swinburne has to offer.



This includes (KIOSC) at Wantirna, the Factory of the Future, state of the art research laboratories, our new Innovation centre at Hawthorn, Advanced Engineering at Croydon as well as the Industry standard Vocational facilities at all three campuses.

VCE Connect students will live and learn the STEM way with the support of Swinburne Higher and Vocational Education. They will have access to cutting edge research and industry, be given time to think, explore and chat with local “makers” and have the support of passionate and versatile staff. The opportunities for learning and innovation for these students, will be unique and rare in a VCE program.

For more information, click [HERE](#).

Events for Technologies Teachers

National Future Work Summit Discounts for DATTA Vic Members



[The National Future Work Summit](#) is taking place in Melbourne on the 30th May. This event is an exciting opportunity to see how social, economic and technological trends will impact tomorrow. The summit gives educators an opportunity to see how technology is changing the way we work, and gives ideas on how our students can adapt to these changes. With speakers from Google, Microsoft, MYOB and more, the event will provide an excellent source of information and inspiration.

DATTA Vic members will receive a 10% discount on tickets. Download this [flyer](#) for details on how to register.

FabLearn Conference 2018 25th & 26th May, Lauriston Girls School



FabLearn is the most up-to-date, hands-on digital learning event for Australian teachers. Handpicked educators come together for two intensive days to share their knowledge on the hottest topics and trusted techniques to address digital curriculum challenges. Workshops cover electronics, design thinking, understanding prototyping, 3D printing, building robotics and exploring entrepreneurship. Participants will take away lesson plans, new ideas and meet like-minded educators. [Book now](#) and secure the earlybird rate of \$395+GST.

Food & Fibre - the Original STEM

29th April - 1st May, Realm Hotel Canberra

Primary Industries Education Foundation Australia ([PIEFA](#)) is holding their 2018 conference in Canberra from the 29th April to the 1st May in Canberra. The theme is *Food & Fibre - the Original STEM*. Participants can learn and network with outstanding educators and industry leaders from around Australia and overseas. The event is must for all educators seeking to deepen the learning of their students through a relevant, real-life and rigorous context. Download the program [HERE](#) and register [HERE](#).



The Scarf Festival 2018 - *Living on the Land*



Entries Close 22nd April - your class can submit a group entry!

This festival is the National Wool Museum's celebration of all things scarf! The theme for 2018 is Living on the Land - *'A sense of place and connection. The natural and built landscapes, the place where we live, work and play.'* Entries for the festival close on the 22nd April, and you can submit as an individual or a group - making it a great classroom project! For more information on how to enter, click [HERE](#).

The exhibition runs from 8th June to the 26th August - note participants of the [Big Wool Day Out](#) will get a guided tour of the show!

Victorian Indigenous Engineering Winter School



The Victorian Indigenous Engineering Winter School (VIEWS) is a program for Year 11 and 12 Indigenous students that will expand their perspective on engineering. Over six days they will get an insight into what it's like to study and work in engineering.

Students will have the opportunity to learn about the different pathways available to become an engineer and hear first-hand the inspirational stories of Indigenous engineers and engineering students. By the end of the week they will have an appreciation of what an engineer does and how they can impact society and improve the lives of people across the globe. Click [HERE](#) for further details on the program and information on how to apply.

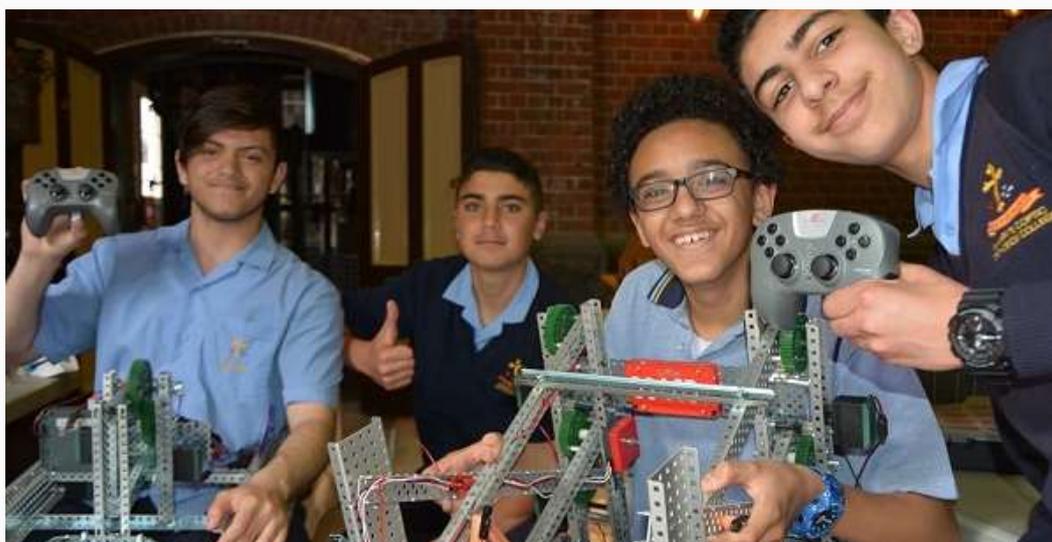


goITGirls Work Experience Program



The goIT Girls program from TATA Consultancy Services aims to inspire young women to pursue careers in digital technology. The week-long program enables girls in Year 10 and 11 to learn from role models, sharpen their coding and technical skills, develop skills for employment and challenge their perceptions of technology and occupational gender stereotypes. 2018 program dates for Melbourne and application forms are available [HERE](#).

Robotics in Victoria



If you are interested in robotics, there is plenty happening in Victoria for schools over the coming months!

VEX Robotics



DATTA Vic will be running a [VEX All Day Intensive](#) teacher workshop on 4th June at Bundoora Secondary College

Galen Catholic College and Hillcrest Christian College are currently representing Australia at the 2018 VEX Robotics World Championships. Their teams pushed their robot skills to limit last year and truly deserve to be representing Australia. A special thanks go to their coaches Maree Timms and Simon Taylor. Over the past 2 years VEX has grown 10 times in size, and schools across the state are introducing more events for students.

This year there will be an open scrimmage series across Templestowe College, Bundoora College & Mount Alexander College. The dates will be available on the [VEX calendar](#). There will also be regional events hosted at several of the new tech schools and in Wangaratta and Wodonga. Other schools are encouraged to open their doors and run similar events.

In Melbourne there will be a similar tournament series to last year, with the addition of July season opener at Copperfield College. See below for a list of events:

Melbourne Dates:

- April 30 - Bundoora Secondary College - EDR Kiwi Challenge [PLEASE RSVP ASAP](#)
- May 18 - Harvester Tech College - DATTA Vic VEX IQ pre-season [PLEASE RSVP ASAP](#)
- July 21 - 2018/19 Season opener - Copperfield College (EDR & IQ).
- Aug 18 - Australia Open (EDR International Event) (IQ Domestic)- Templestowe College.
- Sept 10 - Bundoora College (EDR & IQ)
- Oct 13/14 - Melbourne Exhibition Center – Technology and Gadget Expo (EDR & IQ)
- Nov 9 – Science Works (EDR Only - 25 team cap)
- Dec - Nationals (EDR & IQ) Details TBC

For all VEX enquiries, contact [Travis Burroughs](#).

Robocup Junior

Robocup has a big year ahead, with Regional, State and National events coming up in Victoria. If you want to find out how to get involved, a Teacher PL is running at the University of Melbourne from 5pm - 7pm on the 4th May. Contact Chris Eagan at egan.chris.j@edumail.vic.gov.au to find out more. For details on Regional Competitions in Ballarat, Geelong, Warragul and Melbourne, along the the Victorian State and Australian National events, visit the [Robocup Junior Victoria Website](#).



News from Tasmania

2017 Tasmanian STEM Excellence Awards



Congratulations to the 2017 Tasmanian STEM Teachers of the Year! Pictured above is Phillipa Clymo from Waimea Heights Primary School, who was the winner of the primary category. Click [HERE](#) to read an interview with her from *Education HQ*.

Ann Burke (right) from Marist Regional College won the Secondary award - find out more about her work [HERE](#). To read more about the awards, including the winners of all the categories, click [HERE](#).



Join DATTA Vic for:

- free resources
- discounted PL & conference rates
- reduced prices on text books
- support with curriculum implementation
- help with teaching STEM
- expert advice
- networking opportunities
- rural & regional programs
- support with OH&S issues
- special prices for students & CRT

Sign up today, or contact Laura at pl.datta.vic.edu.au to chat about the benefits of membership for you and your school.

