2016 STEM LEARNING
CREATIVE PROBLEM SOLVING
DESIGN THINKING

NORTHERN COLLEGE OF THE ARTS & TECHNOLOGY • DECEMBER 8TH
Ultimaker
AWARD WINNING 3D-PRINTER

GEARED FEEDER
SWAPPABLE NOZZLES
OPTIMIZED AIRFLOW

CONTACT

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Welcome

“Maker Space (also referred to as hackerspace, hackspace, and fablab):
A creative, DIY space where people can gather to create, invent, and learn”

A Librarian’s Guide to Maker Spaces

DATTA Vic welcomes you to our annual Makerspace Conference, and to the Northern College of the Arts & Technology (NCAT). Makerspace will explore STEM learning & teaching, creative problem solving and design thinking – as well as celebrating the joy of making!

The program will also provide an exciting opportunity for delegates to explore best practice in new technologies, new approaches to teaching and learning, and to prepare for the New Technologies Curriculum through a range of practical and seminar-style workshops. Thanks to Hans Chang from Protoworks and Fab9 for running our makerspace, and to our trade exhibitors for offering a wide range of hands-on activities and tinkering opportunities for delegates!

We are also delighted to be running our live student competition, So You Think You Can Design as a textiles event. Students from different schools will compete in a range of design challenges, from creating mood boards to full scale prototypes. These tasks will be completed throughout the day, and you’ll be able to watch the participants as they work. Thanks to Katrina Wheaton-Penniall for running this event!

SYTYCD highlights new techniques and possibilities within Product Design and Technology, as well providing both participants and spectators with entertainment and inspiration! We’re delighted to welcome Bernina Australia and Beyond Tools on board as project sponsors.

Conference Schedule

8.00am – 8.45am  Registration, Trade Exhibition, Tea & Coffee
8.45am – 9.00am  Welcome from the DATTA Vic President
9.00am – 11.00am Workshops/Presentations (Sessions 1 & 2)
11.00am – 11.30am Morning Tea & Trade Exhibition
11.30am – 1.30pm Workshops/Presentations (Sessions 3 & 4)
1.30pm – 2.30pm  Lunch, Trade Exhibition & SYTYCD Awards
2.30pm – 4.30pm  Workshops/Presentations (Sessions 5 & 6)
4.30pm           Close
## Workshop Overview

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## Workshops

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### Workshop 1

**Maker Space** with Protoworks

- **Session 1**: 9am – 10am
- **Subject Area**: ALL, Suitable for: ALL
- **Room T13**

Join Hans Chang from Protoworks and explore practical ways to introduce digital fabrication tools into your classroom or makerspace. He’ll also showcase some of the latest innovations available to schools free of charge.

Also, you can join our trade exhibitors for a range of hands-on makerspace activities, including:

- 3D Printing systems – 3D Printing projects
- Beyond Tools – Experience the latest laser technology and industrial machinery & tools, including mini three axis CNC
- Chevington Tools – Hands-on metal projects to take back to your school
- Design ability – STEM projects using the PowerAnchor
- Imaginables – 3D print your personalised key tag
- Metal Form Group – Demo of the CNC plasma cutting machine
- OnGuard Safety – Safety training in the palm of your hand (bring your own device)
- Prytec Solutions – Introduction to the latest Auto Tool Change CNC
- Timbecon – Demo of the SawStop table saw

Protoworks founder Hans Chang has built a career on launching new technology products to the mass market and now advocates for the maker movement as a channel for academic-industry collaboration in Australia. He holds an EE Engineering degree from the University of Canterbury, NZ and an MBA from UCLA Anderson. Hans is passionate about maker education and using 3D printing technology to complement STEAM subjects.

### Workshop 2

**Art Yarn** by Suzanne Arnott

- **Sessions 1 and 2**: 9am – 11am
- **Subject Area**: Textiles, Suitable for: Primary, Secondary, VCE/VET/VCAL
- **Room T17**

Using a range of fibres, beads and found objects, you will explore the concept of creating art yarn. Processes will include plying, Navajo plying, using a drop spindle and adding special fibres to wool tops. **Not recommended for people with allergies to wool and alpaca fibres**.

Suzanne has been involved in teaching textiles and fibres her whole life. She majored in Textiles in her Bachelor of Education many moons ago. She has been involved with a lot of digital technologies but is enjoying getting covered in fluff and back to her roots!

### Workshop 3

**CAD & Sheet Metal Working** by Anthony Gasson

- **Sessions 1, 2, 3 & 4**: 9am – 1.30pm
- **Subject Area**: Wood, Metal & Plastics, Suitable for: All/General
- **Rooms T3 & T9**

We are all aware that CAD is useful for 3D printing and design of solid models, but did you know that you can quickly design sheet metal projects using Solidworks? In the first workshop (Session 1 & 2), you will focus on Solidworks sheet metal design. In the second (Session 3 & 4) you will manufacture your designed sheet metal product in the engineering workshop. **Participants can register for Part 1 (Sessions 1 & 2), or Part 2 (Sessions 3 & 4), or join Anthony for the full 4-hour program**.

Anthony is the Technology Studies Program Manager at NCAT, and teaches Engineering to year 10 and Systems Engineering at VCE level. He has a background in the aviation industry and has strong interests in computers, emerging technologies, manufacturing and education.

### Workshop 4

**Budget Maker Space** by Veena Nair & Felicia Limogiannis

- **Sessions 1 and 2**: 9am – 11am
- **Subject Area**: ALL, Suitable for: All
- **Room T20**

This session is all about ways to set up a Maker Space on a budget, along with resources and strategies to support teachers and students in the STEM curriculum.

**Felicia** is an enthusiastic secondary Maths teacher with a philosophy of ‘create mathematicians, one classroom at a time’. Through her teaching, she has learned and created many new and exciting ways to engage students in learning Maths as well as helping them to see it as a fun subject, full of magic. **Veena Nair** has more than 20 years’ experience teaching Science, Technology, Maths and Engineering to all levels. She has taught in three different countries across four different curricula. **Veena is a member of the DATTA Vic committee.**
Workshops

Workshop 5
Auto Launch Scorpio Dragsters – Building and STEM-Focussed Folio by David Carpenter
9am – 11am (Sessions 1 and 2)
Subject Area: Systems Engineering & Wood, Metal & Plastics, Suitable for: Secondary, VCE/VET/VCAL
Rooms T6
Teachers will build a Scorpio Dragster out of a variety of readily available plastics and will incorporate an additional automatic launch and stop facility. Participants will also be briefed on, and take away a draft of a folio that will support the investigation, planning, production, testing and racing of the vehicle. The folio will highlight multiple opportunities for testing throughout the project and has scope for incorporation of STEM areas.

David came late into teaching from the aircraft industry and has been teaching for almost 10 years. He currently works at St Patrick’s College in Ballarat. He has skills across the technology spectrum and enjoys designing dynamic learning experiences.

Workshop 6
Crash Course for mBot – Learn Coding & Robotics by Pathik Shah, Pakronics
9am – 11am (Sessions 1 and 2)
Subject Area: Systems Engineering & Electronics; Suitable for: ALL
Room T2
Discover mBot - a cute, popular and affordable robot kit for schools. Hundreds of teachers are using this robot to teach electronics, robotics and coding.

Pathik Shah runs Pakronics, an online shop for makers. They offer a wide range of Do It Yourself electronics platforms like Raspberry Pi, mBot, Arduino & Genuino, Circuit stickers and many more.

Workshop 7
Build a Musical, Infrared Controlled Motor Driver Picaxe 14M2 Microcontroller by Pat McMahon
9am – 11am (Sessions 1 and 2)
Subject Area: Systems Engineering & Electronics; Suitable for: Secondary, VCE/VET/VCAL
Room T16
Participants will build and take away Pat’s new enhanced, all-in-one Picaxe 14M2 Microcontroller, which is capable of playing music, being controlled by a universal remote and also being able to easily run a robot from the on-board motor driver. You’ll also see samples of work from Pat’s students.

Pat has had, in the past 11 years, over 3000 students from year 7 to 10 build a Picaxe Microcontroller and control some great, award-winning models. Pat has been fortunate to have shown his students’ work overseas, and has received 5 various Australian, State and Regional awards for Innovation and Excellence.

Workshop 8
Free-form Machine Embroidery Techniques by Christine Ciccone & Cathy Sofarnos
9am – 11am (Sessions 1 & 2)
Subject Area: Textiles; Suitable for: ALL
Room T14
This hands-on workshop is a complete unit of work. The technique combines wool tops, fibres and other materials to create a fabric design that can be used as a cushion cover, incorporated into a garment or other textile product. The unit investigates the different stages and steps of the design process, enabling students to express their creativity while developing technical skill. Students at the junior level are deeply engaged in the project, and the concept can be modified to cater to the senior levels.

Participants must bring their own sewing machine, free-motion embroidery foot and coloured threads.

Christine has been teaching textiles for the last 4 years across all levels, including junior boys, VET Applied Fashion Design & Technology and VCE PD&T. She is passionate about engaging students in learning through creating opportunities that encourage experimentation, using a wide variety of materials and processes. Cathy is a Sales & Training Consultant for Bernina Australia. Her role is wide and varied and includes training, education and support for Bernina dealers in Victoria, S.A and Tasmania. Bernina have enjoyed a long and established relationship with schools around Australia, and this conference gives Cathy the opportunity to inform teachers of the latest product information and sewing techniques that can easily be brought into the classroom environment.
Workshops

Workshop 9
Spinning Plates – Managing OHS in Technology by Andrew Nicholls
9am – 11am (Sessions 1 and 2)
Subject Area: Systems Engineering & Electronics & Wood, Metal & Plastics; Suitable for: Secondary, VCE/VET/CAL
Room T1
Got questions about managing OHS and Duty of Care in your Technology learning space or workshop? Need some processes to help you streamline your RA, SWP, SDS or MP? Join this informative session to learn all you need to know, and hear from colleagues that share your concerns and issues. PPE not required!

Andrew Nicholls is a Leading Teacher of Technologies at Mill Park Secondary. He is currently completing a Master degree in Education and Occupational Health, Safety and Environment Management with a focus on the Design Technologies infrastructure.

Workshops 10 & 11
Makerspace with Protoworks For a description of this session, see Workshop 1.
10am – 11am (Session 2) and 11.30am – 12.30pm (Session 3)
Subject Area: All; Suitable for: All
Room T13

Workshop 12
The New Technologies Curriculum – Victoria and Australia-Wide by Peter Murphy
11.30am – 12.30pm (Session 3)
Subject Area: All; Suitable for: All
Room T4
Get to know the new Victorian and Australian Curricula for Technologies F–10. After a brief introduction you will get some time to explore the documents in full and then work collaboratively to develop ideas and share your thoughts on implementation in 2017. Teachers from all Technology areas welcome.

Peter Murphy is President of DATTA Vic. He trained as an industrial designer in the UK and is now a PD&T Teacher and Leading Teacher at Northcote High School. He was a part of the 2011 PD&T VCE review panel and was part of the VCAA and ACARA expert panels reviewing the Australian Curriculum. Peter has published teacher support material for VCE Unit 1 PD&T and is the creator of So You Think You Can Design and Design & Technology Week.

Workshop 13
Design, Interfacing and Programming of Complex Electro-Mechanical Systems with Arduino by Seven Vinton
11.30am – 1.30pm (Sessions 3 and 4)
Subject Area: Systems Engineering & Electronics; Suitable for: Secondary/VCE/VET/VCAL
Room T1
This hands-on workshop will provide an insight into the practicalities and pedagogies involved with practical student projects which are aimed at development and design of complex electro-mechanical systems such as robotics systems, CNC machines, etc. Discussion will revolve around the learning structures, materials and technologies involved in the construction of a CNC machine, and participants will have the opportunity to engage in some of the fundamental Arduino microprocessor lessons required for successful production of these complex systems.

Currently the Leader of Curriculum and Professional Learning at Oberon High School, Seven has held several leadership roles in his 16+ years of teaching, including eLearning Leader and Hands-On Learning Coordinator. Prior to teaching, Seven gained more than 15 years’ experience in the Hospitality and Tourism industry, developing business, ICT and media skills. Seven’s teaching portfolio ranges from Creative Art – Painting to Systems Engineering. He currently instructs students in the Programming languages C, C++, MATLAB, Javascript, Python, Ruby and V8. Seven values the world sharing of knowledge, and contributes to this via his YouTube channel, ICT Tools for Teachers

Workshop 14
“Sounds Like” – a Primary STEM Project by Rachel Rayner, Discovery Science & Technology Centre, Bendigo
11.30am – 1.30pm (Sessions 3 and 4)
Subject Area: All; Suitable for: All
Room T20
In this workshop, you will get hands-on and creative by making musical instruments and exploring sound through various activities, while discussing the delivery of the new Design & Technology curriculum at your school.

Rachel has been designing and delivering education programs on Science and Technology for both primary and secondary students for the past 5 years in partnership with Questacon, the Ocean Exploration Trust and the Discovery Science & Technology Centre.
ENHANCE THE LEARNING ENVIRONMENT!

From industrial shop classes to art, schools around the world are discovering what a powerful tool a laser can be in the education of students. The laser process can incorporate industrial design, artistry and woodworking skills. It can increase a student's ability to think critically while developing creativity. Expand your educational curriculum today!

- Campus Signage (Indoor & Outdoor)
- Fabrication for Technology Departments
- School Trophies & Awards
- Fundraising
- Graphic Arts
- Much More!

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www.alfexcnc.com.au
Workshops

Workshop 15
Geometric Design & Paper Piecing Technique - Textiles by Rose Bengasino
11.30am – 1.30pm (Sessions 3 and 4)
Room T15

This workshop incorporates the Technology process and allows the students to research and develop the design and construction of an individual geometric design. Accuracy with drawing is important since this then becomes their pattern for continuing with the project. Students then make their own patterns from their drawings and continue with the introduction of hand-sewing techniques, tacking and whip-stitch in the construction phase. **Participants should bring their own sewing machines.**

*Rose graduated as a Fashion Designer at RMIT in 1976 and went on to complete a Graduate Diploma in Education at Melbourne University in 1993. She currently teaches Food Technology, Textiles and Fashion at Caroline Chisolm Catholic College.*

Workshop 16
WeDo 2.0 Coding & Computational Thinking for Early Years by Libby Moore, Moore Educational
11.30am – 12.30pm (Session 3)
Room T14

*WeDo 2.0 is a robotic concept for teachers of grades 2 to 4. In this hands-on workshop you will build a Space Rover Robot and program it using outputs motor and input sensors. Experience how to follow, describe and represent a series of steps and decisions needed to solve simple problems. This resource links strongly to the new Technologies curriculum which encourages coding and computational thinking across the school curriculum.*

*Libby Moore established Moore Educational as a national LEGO Education Distributor. She is the Director of LEGO Education Centres in Melbourne and Brisbane, where unique learning environments engage children and teachers in creativity, innovation and technology for 21st Century learning.*

Workshop 17
Hands-on Metalcraft by Greg Cowie
11.30pm – 1.30pm (Sessions 3 & 4)
Room T13 – at Chevington Tools trade exhibition stand

This is a hands-on session using the genuine Metalcraft range of tools. These safe and easy-to-use tools enable students of most ages to create all sorts of metalwork and D&T projects. Work is hand-powered at the pull of a handle without needing heat.

*Metalcraft Tools from England are now used in over 1600 Australian schools from primary school through to senior, adult and commercial applications. These tools are hand-powered and the metal needs no heating, making work safer, faster, easier to repeat and more cost-effective than older methods. Chevington Tools have been supplying these great tools since 1997.*

Workshop 18
Creating with CREO by David Fletcher
12.30am – 1.30pm (Session 4)
Room T2

CREO (formerly Pro/Engineer) is a powerful CAD program used to produce models and assemblies for Design & Technology projects, with rendered views, animations, dimensioned working drawings and sheet metal development work. Files may be exported for 3D printing, CNC machining and laser cutting.

*David has taught Product Design & Development and Visual Communication at Huntingtower School. He is a CREO trainer for Victoria and is the Secretary of DATTA Vic.*

Workshop 19
Key Elements of Successful STEM Projects by Merrick Russell, Designability
12.30pm – 1.30pm (Session 4)
Room T4

This workshop addresses key elements of successful STEM projects including the centrality of making, quality feedback, easy and rapid evaluation, modification and conjecture. PowerAnchor projects are used as examples.

*Merrick started work as an Industrial Designer and then moved into teaching for 17 years. He now continues his work in both fields as CEO of Designability. He has developed projects used in over 500 Australian schools, and has designed exciting equipment to support his vision. Merrick has recently been a speaker at conferences in Dubai, Singapore and Nanjing.*
Workshops

Workshop 20
Everyone can Code with LEGO Mindstorms EV3 Robotics by Libby Moore, Moore Educational

12.30pm – 1.30pm (Session 4)
Subject Area: Systems Engineering, Electronics, Robotics; Suitable for: Primary, Secondary
Room T14

Ignite student engagement and energise learning through the use of LEGO Mindstorms Education EV3 in your classroom. This hands-on workshop will show you how to implement digital solutions as simple visual programs involving branching, iteration and user input. Have your students exercise creative problem solving and team working skills while deepening their understanding of Digital Technologies and Design & Technology processes.

See Workshop 16 for Libby’s biography.

Workshop 21
Textiles Project Ideas for Years 9 & 10 by Phillippa Loton

2.30pm – 3.30pm (Session 5)
Subject Area: Textiles; Suitable for: Secondary
Room T20

This workshop is aimed at providing new ideas for Textiles projects which link to the new Victorian curriculum and provide skill building opportunities as a pathway to VCE Product Design & Technology. Ideas and examples will be shared, and participants can view folios and examples of student work.

Philippa is a secondary teacher of Product Design & Technology and Art at Bacchus Marsh Grammar School, where she has worked for 6 years. She previously worked at RMIT as a Fashion Design teacher, and has held various positions in the clothing industry. She enjoys sharing resources with other teachers.

Workshop 22
No Space, No Time, No Money = Makerspace by Wooranna Park Primary School

2.30pm – 3.30pm (Session 5)
Subject Area: All; Suitable for: Primary
Room T1

Discover Wooranna Park’s journey into STEAM including Makerspaces in classrooms, an elective, and the development of a STEAM Centre. You’ll also take part in a Makerspace challenge!

Debbie Nugent, Gabby Schwarz and Jess Thaller are members of the STEAM committee at Wooranna Park Primary in North Dandenong. They have been working to embed STEAM into the everyday curriculum of the school.

Workshop 23
The Design of Innovative Technology Spaces by Andrew Nicholls

2.30pm – 4.30pm (Sessions 5 & 6)
Subject Area: All; Suitable for: All
Room T15

What would your ultimate learning space look like? How would it blend the multi-disciplinary learning that Design Technologies and STEAM offer? Collaboratively work with your peers to discuss and conceptualise the future of Technologies infrastructure.

Andrew Nicholls is a leading teacher of Technologies at Mill Park Secondary. He is currently completing a Masters’ degree in Education and Occupational Health, Safety and Environment Management with a focus on the Design Technologies infrastructure.

Workshop 24
The Fundamentals of Technical Drawing by Tony Willie

2.30pm – 4.30pm (Sessions 5 & 6)
Subject Area: Engineering; Suitable for: Secondary, VCE/VET/VCAL
Room T2

Do your students have difficulty expressing their ideas? In this workshop, you will explore the fundamentals of technical drawing and the basic tools you need to introduce students to this dwindling skill in the average classroom. Tony will take you through the basics, introduce you to the concepts that students have difficulty with, show you how to produce a class set of tools that can be moved around from room to room, and guide you step-by-step through an example of a drawing lesson delivered to Year 12 engineering students.

Over his 30+ years in the Fitting and Turning trade, Tony has gained experience working in a variety of industries, including Steel Production, Nuclear Research and Engineering. Having taught for 10 years now, he is passionate about vocational education. His personal interests include CNC machining, jewellery making and motorcycles, and could be described as a general ‘maker of things’.
Workshops

Workshop 25
Making CAD Work for Schools and Teachers as well as Students by Anthony Loring
2.30pm – 4.30pm (Sessions 5 & 6)
Subject Area: Systems Engineering, Wood, Metal & Plastics; Suitable for: Secondary, VCE/VET/VCAL
Room T4

The workshop will demystify three misconceptions that all CAD systems are (1) costly to implement across a school or department, (2) there is a steep learning curve to acquire the knowledge of infinite numbers of menus, and (3) that you need to spend an eternity to develop training materials. Anthony will also demonstrate a free web system that has low hardware costs, is simple in CAD terms to learn and has a completely free school-based training package. Bring your own tablet or laptop.

Anthony worked internationally in industry for over 30 years as a Product Design Engineers. He was a registered Engineering Designer in the UK and held positions such as R&D Manager with an international company. There are numerous products in the UK and Australian markets designed by him or his design team.

Workshop 26
Plastic Made Easy by John Junor
2.30pm – 4.30pm (Sessions 5 & 6)
Subject Area: Wood, Metal & Plastics; Suitable for: Secondary, VCE/VET/VCAL
Room T6

Using readily available domestic ovens, wooden moulds and shapes, leather garden gloves and a plastic bender, acrylic plastic can be ‘slumped’, cut and joined to create boats. Finish the project with simple hand tools and machines.

John is a Design Technology and Art teacher with 36 years’ experience across 10 different schools. He has worked previously in wooden boat building and furniture making. He is currently part-time at Lalor Secondary College and has recently ‘rediscovered’ the design possibilities of plastic.
Workshop 27
Finding Design in Science by Angela Gigliotti, PrimaryConnections

Room T3
2.30pm – 4.30pm (Sessions 5 & 6)
Subject Area: All; Suitable for: Primary

Science, Technology, Engineering & Mathematics (STEM) is increasingly a key focus for schools, so Primary Connections is offering a workshop to help educators grapple with what teaching Design & Technology looks like in a Primary science classroom.

Angela began teaching Secondary Science in the Victorian Catholic Education system in 1991. Angela is now a Science Specialist at a large Primary School in Melbourne. Since 2014, she has been responsible for implementing a whole-school approach to science education focussed on building individual teacher confidence and capacity. Angela also joined the PrimaryConnections team in 2014, is particularly inspired by the possibilities presented within the STEM educational landscape.

Workshop 28
VEX and LEGO Programming & Simulation in Robot Virtual Worlds by Chris Hamling, Kiwibots

Room T14
2.30pm – 3.30pm (Session 5)
Subject Area: System Engineering, Electronics, Wood, Metal & Plastics; Suitable for: Secondary, VCE, VET/VCAL

Using Robot-C and Robot Virtual worlds, Chris Hamling of Kiwibots will demonstrate how programming can be tested in a virtual environment before every being uploaded to a robot. The Robot Virtual Worlds application also provides engaging fantasy worlds where students can write C Code to navigate a small robot. If you are looking for a new and engaging means of teaching robotics or C programming, this is a must see workshop.

Chris Hamling is the National Manager for the New Zealand Robotics Charitable Trust – The Kiwibots. Chris is passionate about achieving their mission ‘to inspire a Passion for Science and Technology’ so that the young people can really see how much fun they can have in a technology career.

Workshop 29
Nuno Felting & Beyond by Sara Pearce, the National Wool Museum

Room T17
3.30pm – 4.30pm (Session 6)
Subject Area: Textiles; Suitable for: Secondary, VCE, VET/VCAL

Felting is one of the oldest techniques for making fabric. You will explore the structure of wool fibres and create a felted scarf or sculptural brooch. You’ll also expand your understanding of mixing natural fibres as you experiment with nuno felting – the art of binding fibres onto fine fabric.

Sara’s museum career has included a position with the Smithsonian Museum’s Conservation Unit for Textiles. She also studied as a history and science teacher. She has been with the National Wool Museum since 2011.

Workshop 30
Delivering the DigiTech Curriculum as a Makerspace by Paul Taylor & Andrew Hansen

Room T1
3.30pm – 4.30pm (Session 6)
Subject Area: Systems Engineering, Electronics, Digital Technologies; Suitable for: Secondary

A hands-on workshop exploring the pedagogy and curriculum structure used at Ringwood Secondary College to turn the DigiTech Curriculum into a project-based makerspace for all. Through designing, developing and refining a game, you will learn how to use the Agile Development Processes for meaningful and authentic assessment of creative tasks within makerspaces and classrooms.

Paul is a game designer, educator and software engineer. He now works at Ringwood Secondary College teaching 3D printing, programming, game design and production. In between running and participating in Game-Jams and coordinating School eSports, Paul is redesigning the classroom at Ringwood SC to take full advantage of the opportunities that the Digital Technologies curriculum provides to create world-leading thinkers and creators.

Workshop 31
Scientific Enquiry and STEAM by Jessica Hansen & Lucy Jacobs

Room T14
3.30pm – 4.30pm (Session 6)
Subject Area: Electronics, STEAM; Suitable for: Primary

This is an upper primary workshop describing the teaching and learning of Science enquiry, with a key focus on students’ engagement in STEAM.

Jessica Hansen and Lucy Jacobs currently lead the Senior Learning Unit at Bellaire Primary School. The team have experience in designing inquiry units that blend various curriculum elements with literacy. The recent ‘Let There Be Light’ unit integrated Physical Science outcomes with English components and was featured by New Pedagogies for Deep Learning.
Conference Information

Register for the Conference at www.datta.vic.edu.au

About NCAT
The Maker Space Conference is being held at NCAT, 62 Murray Road, Preston VIC 3072. Tel 03 9478 1333 or visit ncat.vic.edu.au

The Northern College of Arts and Technology caters for Year 10, VCE, VCA and post-secondary students seeking a specialised education in the performing arts, visual arts, design, media, trades or technologies. Industry professionals deliver innovative curriculum designs to meet current Tertiary, TAFE and industry requirements. With one of Victoria's broadest VET offerings, state-of-the-art facilities and a highly successful track record, the College provides a mature study environment to foster individuality and personal growth.

As a College, they recognise multiple types of intelligence. They reward practical problem solving, creativity, lateral thinking, building, fixing, designing and innovating. Every student benefits from a curriculum designed to encourage individuality and creativity. Their hands-on learning approach develops confidence, teamwork and co-operation skills for students who wish to pursue further study, apprenticeships or employment.

DATTA Vic wish to thank Raffaela Galati-Brown, Daniel Knott, Tom La and all the staff at NCAT for their help in planning and running the Maker Space conference.

Parking & Transport
There is parking available on-site at NCAT, and additional spaces available in the surrounding streets. For public transport options visit ptv.vic.gov.au

Accommodation
Mantra Bell City are offering our delegates a 10% discount on any accommodation booked for the conference. Just mention DATTA Vic at the time of booking. Call 03 9485 1000, email bellcity.res@mantra.com.au or visit www.bellcity.com.au/hotel/mantra-bell-city/

Enquiries
Contact Laura at pl@datta.vic.edu.au or 03 9349 5809 if you have any questions about the DATTA Vic Maker Space conference. For all invoicing enquiries, contact Hannah on 03 9349 1538 or admin@datta.vic.edu.au.

Workshop Sessions
Workshop sessions have limited numbers - please book early to ensure your first choice. Some workshops run in 2 parts over 2 sessions - be sure to book both part 1 and part 2. Also, please make sure you note which workshops require you to bring your own materials, laptops or tablets.

Trade Exhibitors
All trade exhibitors are located in T13 along with the catering and Maker Space, allowing delegates to peruse a range of resources, materials and equipment at their leisure throughout the day. Please see the Conference Trader Listing in this program for further details of our sponsors, trade exhibitors and advertisers.

Presenters
A huge thank you goes to all of our conference presenters, for giving up their time and for sharing their skills and knowledge. We are so grateful for your contribution.

Catering
Our conference is catered by James Ray & Co The Caterers. Thanks for the lovely food! If you have any special dietary requirements, please be sure to provide details on your booking form.

Pricing
DATTA Vic Member: $245
Non-Member: $345*
Associate Member: $200
Associate Non-Member: $266*
Student: $66*
*includes DATTA Vic membership for 2017

Cancellations
DATTA Vic will refund the full fee, less an administration cost, if you cancel 4 or more working days before a workshop, seminar or conference and 50% of the fee if you cancel 1 to 3 days prior to the event.

If you register but do not attend without cancelling prior to an event you will be charged the full fee unless a medical certificate is provided.

Disclaimer
DATTA Vic will not accept liability for damage or loss of any nature sustained by participants, suppliers, agents, contractors, consultants or their accompanying persons, to their personal property as a result of the DATTA Vic Makerspace conference, Trade Show or any related events.

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