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These statistics are from our Teacher Shortage Survey from 2019.

www.datta.vic.edu.au

DATTA
VICTORIA
Design And Technology
Teachers Association

Technologies Teacher Shortage Report

Victoria 2019

Survey conducted and compiled by
Design and Technology
Teachers' Association of Victoria
(DATTA Vic)

All enquiries should be directed to DATTA Victoria
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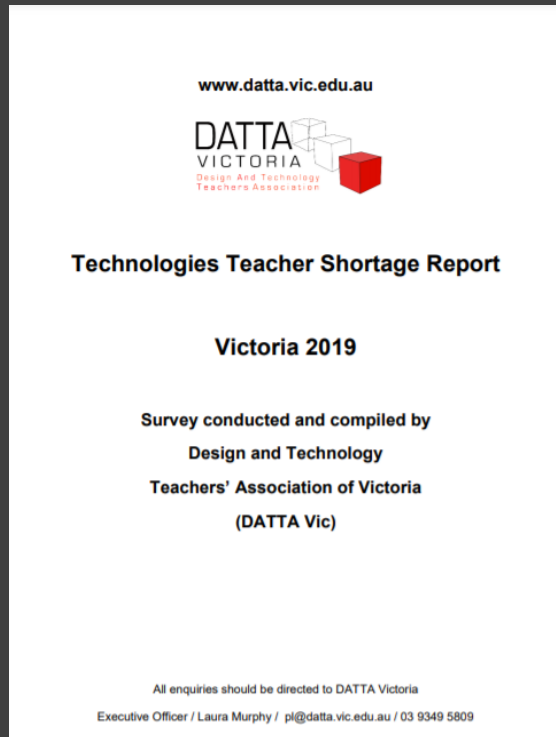
Research into the shortage of Design & Technologies Teachers in Victoria

97%

of our member schools reported having difficulties filling vacancies for Design & Technologies teachers

88%

of our member schools reported using teachers from other learning areas to deliver the Design & Technologies curriculum
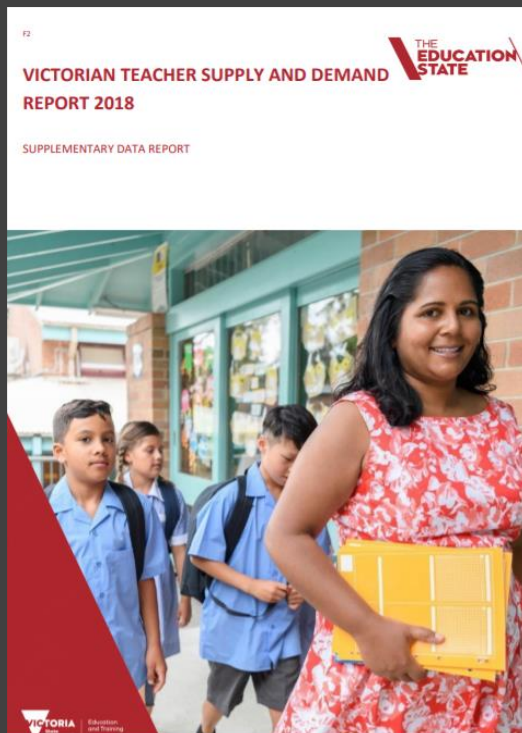
68%

of our member schools believe that the quality of Design & Technologies education has been seriously compromised by the lack of teachers
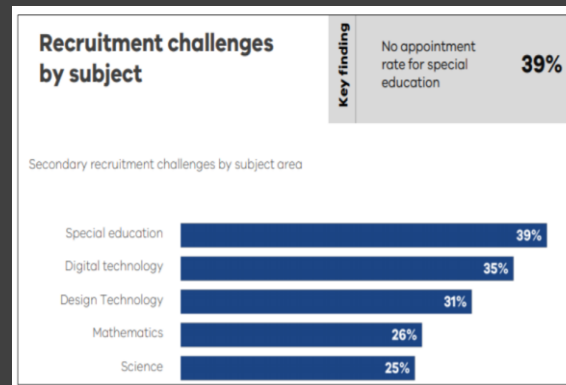
The report is available HERE

Slide 3

The DET's *Victorian Teacher Supply and Demand Report* shows that Design & Technologies is one of the hardest learning areas to recruit qualified teachers for.

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A major reason for the shortage of D&T teachers is the misconception of the learning area – the belief that we teach woodwork and metalwork only. We actually have an incredible progressive curriculum, which focuses on design thinking, sustainability, ethics and creative problem solving. Try searching for "Sustainability" in the Victorian Curriculum – Sustainability is explicitly mentioned in Design & Technologies 37 times, in comparison to 19 times in Geography and twice in Science.

Slide 5

One of the biggest issues we face is that our own Department of Education don't understand our learning area – demonstrated by this graph looking at ITE course specialisation. Design & Technologies is listed as a non-STEM subject….
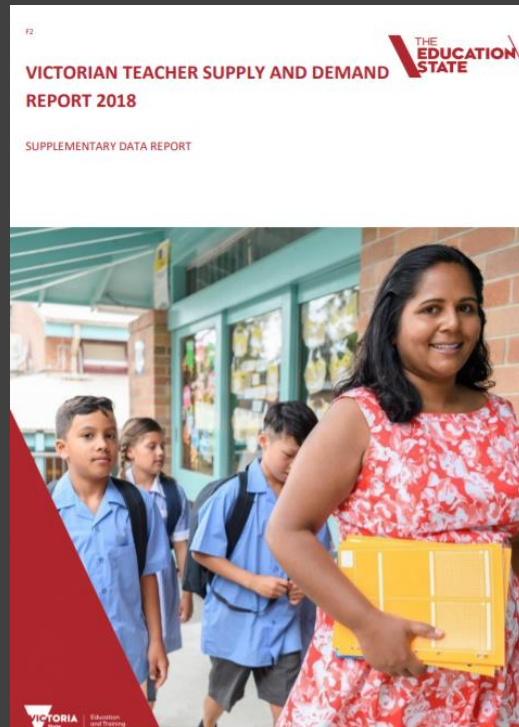
Research into the shortage of Design & Technologies Teachers in Victoria
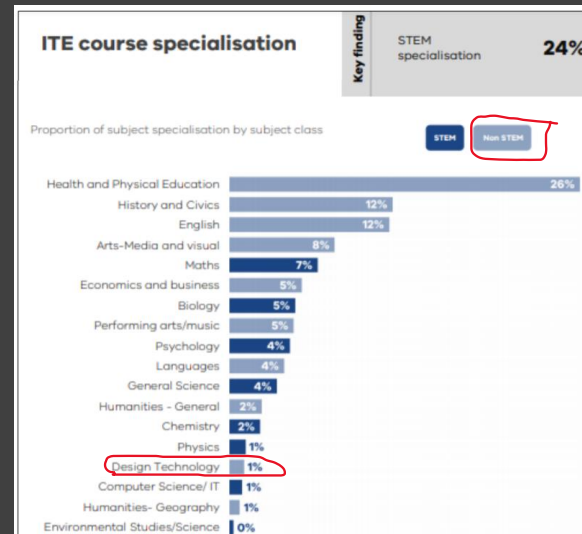
The report is available HERE

Slide 6

…which means we do not qualify for government programs to increase STEM teachers – for example, the SMSI program is currently spending $17 million dollars upskilling 272 out of field teachers in maths and science.

What are the solutions?

1. Create more opportunities for initial teacher education in Design & Technologies

2. Support out of field teachers who are delivering the Design & Technologies curriculum

3. Educate the wider education community on the importance of Design & Technologies education for the future of Australia

And what can Teachers' Associations do about it?

Slide 8

DATTA Vic are advocating with the government and tertiary sector to increase initial teacher education and upskilling programs. We offer help to set up placements for student teachers, and we have a mentor register to match new teachers with experienced educators in their area. We're also working with universities to encourage undergrads from design-related courses to consider a career in Design & Technologies teaching.

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DATTA Vic Teaching Design & Engineering Masterclasses are our biggest program right now – our way to tackle the lack of qualified teachers in the short term until we see more new teachers coming through in our area….

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And what can Teachers' Associations do about it?

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We've delivered two face-to-face Teaching Design Masterclasses, are currently running an online pilot of this program thanks to support from Creative Futures, and we managed to get funding from Google to develop a Teaching VCE Systems Engineering Masterclass

DATTA Vic Masterclasses

Slide 11

We've had great feedback from all of these courses, and we are working really hard to keep them going – although as a small organisation we are limited in capacity to deliver them as often as we would like. Plus without external funding, we have to charge for them, which can be a barrier to regional or low SES schools.

DATTA Vic Masterclasses

"I've taught for 2.5 years as a STEAM (Design Tech) teacher. Now I feel I know what I am actually supposed to be doing."

"Good to get the confidence to stand up for our learning area and make it vital – particularly useful through STEM and cross faculty curriculum planning."

"I will be now leading the drive in collaborative discussion with an emphasis on technology in problem solving and not around learning competencies to build a product, and will also encourage inter-disciplinary cross curricular options."

"The masterclass covered all the requirements to be able to know how to begin teaching VCE Systems. A Lot of practical demonstrations and hands-on activities to develop skills for teaching."

"It was amazing! I learned so much about course content in regards to VCE and I enjoyed learning the components of systems and coding. Very well presented and totally engaging. Thank you!"

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We know this is important to break down the misconceptions of our learning area – DATTA Vic work hard to ensure the wider education community see what a progressive, dynamic and relevant learning area we are….

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And what can Teachers' Associations do about it?

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…National Design & Technologies Week is our main advocacy program. It started 7 years ago as a pilot in a single school to look at how we can shine a spotlight on the incredible work done in D&T. This has grown to a national program engaging around 95,000 students in activities through their schools. DATTA Vic work in partnership with DATTA Australia to deliver this, and we achieve it all on a budget of $6k per year – imagine what we could do with more support!

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We've been looking at the issues of the teacher shortage and out of field teaching as a paper exercise, but we can't forget about the human cost – this is incredible challenging for the D&T teachers we have out there, doing everything they can to engage their students in D&T. This is a real crisis, and without intervention, it will only get worse….

"Staff find it difficult to take leave or pursue higher positions due to trained casuals' availability. This affects health and wellbeing as well as stymies professional advancement."

The learning area is vitally important for innovation in the design and manufacturing industry, and to develop a Technology-aware community, but it is dying out due to lack of new teaching staff, and limited energy and currency in existing staff."

"The question is "Why would anybody want to be a Technologies Teacher?" It is important that there is a clear incentive that is beyond the normal rhetoric, and the pathways to becoming a Technologies Teacher are easy, cost effective (scholarships?) and achievable, especially for people who are currently employed in industry and have fixed financial commitments which may normally prevent swapping employment for further education."

"Technologies learning area delivers what employees are looking for – problem-solving, teamwork, project-based learning – reading literacy texts in a practical context, performing maths in real situations. How is the current shortfall in the workforce going to be overcome if our students don't have the teachers to teach them the skills?"

"I have wanted to quit without a Tech assistant. I can't be expected to do the level of job I know would do me proud whilst doing the job of two. For years it was only me in the Technologies department and I found it really hard. I see Technician Assistant support the most vital part to keeping Technologies teachers."

It's beyond dire. My take on it now is that the lack of available staff coupled with a ridiculous teaching load as the Domain Leader has led me to contemplate becoming an apprentice butcher…due to the stress and anxiety this situation is causing me.