

**Submission
No 228**

INQUIRY INTO TEACHER SHORTAGES IN NEW SOUTH WALES

Name: Mr Mark Tyler

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Submission to Parliamentary Enquiry into the Shortage of Teachers

Mark David Tyler

Former NESA Inspector for Technology Education

I have been a secondary educator for over 40 years both here in Australia and overseas. The majority of this time was spent working for the NSW Department of Education (DET) including 20 years as a Head Teacher in a large Sydney comprehensive high school. Between 2016 and 2020 I was the Inspector for Technology Education at the NSW Education Standards Authority where my primary role was to support the implementation of existing Technology syllabuses and to develop new syllabuses to incorporate the Australian Curriculum into NSW curriculum from Kindergarten to Year 12.

Other significant roles included the Supervisor of HSC Marking for Industrial Technology between 2011 and 2015, also with NESA and a brief secondment to deliver teacher professional learning with the DET. Since 2021 I have been working at a large independent high school as a Senior Classroom Teacher and am soon to take up a position with the NSW Department of Education as a Technological and Applied Studies (TAS) Curriculum Implementation Officer.

Identifying (and accepting the existence of) a teacher shortage

As Technology Inspector I met with senior staff from the NSW DET to encourage them to address what was at the time a looming shortage of TAS teachers. Sadly the best I could achieve was a commitment to gather more data despite their own forecasts of shortages in this and other curriculum areas.

In 2015 the NSW Government released the *Teaching Workforce Supply and Demand* report, Workforce Projections 2015-2022 are provided on page 13, full report attached to this submission. In the area of Technology Education that I am most familiar with, there has been a failure of the stated program to improve the shortage of qualified teachers.

Secondary

There is a more than adequate supply of secondary teachers in the curriculum areas of Creative Arts and Personal Development, Health and Physical Education.

Currently, the supply of English and Human Society and its Environment teachers is adequate. For a number of years, however, English was identified as a potential area of need particularly in Isolated NSW and Inland NSW. In the short-term, offering a small number of teacher education scholarships in English, particularly in combination with another teaching subject such as History or Drama, will ensure an ample teacher supply in this curriculum area.

There is a declining supply of Technological and Applied Studies teachers in some subject areas during the projection period. While the supply is adequate in the short term, the decline is projected to grow faster from 2016. Possible shortages include Engineering Science, Industrial Technology and combinations of subjects such as Food Technology with Textiles Technology. Continuation of sponsored training programs will have a positive impact on the total net supply of Technological and Applied Studies teachers.

There is a decreasing supply of teachers of Languages other than English. Projections for this area are made more complex by the range of language subjects offered and the relatively small number of appointments in some of those subjects. The Department is monitoring the supply of teachers of Languages other than English particularly in Inland NSW.

The overall supply of Science teachers is relatively stable, but only a moderate surplus is projected in some areas of the State. Possible shortages of science teachers include those with approval to teach Physics.

There is a decreasing supply of Mathematics teachers affecting all areas of the State. Any increase in retirement rates above current projected levels and to a lesser extent an increase in resignation rates would have a substantial negative impact on the total net supply of Mathematics teachers.

Continuation of the current staffing initiatives of sponsorship and scholarships will have a positive impact on the total net supply of Mathematics and Science teachers and will be needed to ensure an adequate supply in those curriculum areas in some areas of the State.

Both the peak Technology association in NSW, the Institute of Technology Education and Design and Technologies Teachers' Association of Australia (DATTA) the national association have surveyed their members in recent years to gather data on Technology staffing. The results are sobering and alarming and the situation has become as bad as was predicted.

The *Technologies Teacher Shortage Survey (2019)* conducted by DATTA Australia includes the following text in the executive summary. Full report attached to this submission.

84% of schools are currently using teachers from a variety of other learning areas to make up the shortfall and to deliver the expected level of Technologies education required by National and State curriculum authorities. This puts increasing pressure on qualified Technologies teachers to upskill and support teachers from Visual Arts, Health and Physical Education, Mathematics and Science, who are placed in subjects which they are not qualified to teach. This also represents a significant and growing Work Health and Safety risk to those teachers and their students.

39% of schools surveyed have reduced the amount of Technologies education they offer, and 68% of these schools have indicated that the quality of the remaining programs has also been affected by the shortage of qualified teachers.

In our professional and informed opinion, if significant action is not taken as outlined in this report, the Technologies learning area in Australia will be unsustainable by 2025.

Peter Murphy
President
DATTA Australia

Increasing opportunities to train as a Technology teacher

In my role as Technology Inspector I soon became aware of the serious shortage of Technology teachers being experienced by schools from all educational sectors across NSW. I took it upon myself to address this shortage by lobbying several universities to introduce more training opportunities and met with officers from the NSW Department of Education.

I worked closely with Associate Professor Sarah Howard at the University of Wollongong and Dan Rytmeister, TAS Advisor at the NSW DET to develop a Master of Teaching program to re-train as TAS teachers from other teaching disciplines. Central to the model was the opportunity for pre-service teachers to work with a school-based mentor to develop the skills to teach TAS curriculum. We visited many DET schools in the Illawarra and were able to identify suitable schools keen to participate in and support the program. Preliminary discussions were held about the possibility of expanding this program across NSW. Unfortunately the Covid-19 pandemic derailed the introduction of this program.

I also lobbied the University of Technology (UTS), again collaborating with the DET TAS Advisor to introduce a non-denominational Sydney based full time Technology teaching course to train Technology teachers. Currently only the Australian Catholic University offers a degree course in Sydney. UTS has introduced a Bachelor of Engineering Science degree focussing on Engineering and Computing. Despite a genuine need in this area this course targets students who are more likely to study a full engineering degree. Students who are attracted to Technology teaching are more likely to focus on Design, Food, Metal, Textiles or Timber. Initial discussions with UTS had focussed on leveraging TAFE resources at Ultimo (Textiles), Lidcombe (Cabinetwork) to develop requisite practical

knowledge and skills. An option of working with the nearby Sydney Secondary College Blackwattle Bay Campus to provide workshop experiences was also discussed.

As a sessional lecturer with Southern Cross University instructing pre-service Technology teachers and numerous other interactions with lecturers and pre-service teachers at the Australian Catholic University I believe I developed a very good understanding of current TAS teacher training and the dispositions of current pre-service teachers.

Why aren't school students attracted to Technology teaching?

Current Technology Teacher training courses are not appealing to prospective students. Year 12 students who enjoyed success in practical courses at school are looking for courses that provide more practical experiences and training.

I have taught in 3 NSW schools for periods in excess of 4 years. While at these schools 7 students chose to train as Technology Teachers, all were attracted to the career following their successes as teachers of practical subjects at school, primarily Industrial Technology. Only one of these students commenced studies in Engineering before transferring to Technology Education. Sadly only 3 of these students are currently teaching full-time.

Current courses do not adequately prepare pre-service teachers to deliver NSW curriculum. The abolition of teacher training institutions such as the Newcastle College of Advanced Education (formerly Newcastle Teachers College) under the Dawkins Review in the late 1980s has meant that students are now ill-prepared to deliver significant aspects of TAS curriculum. Sadly the focus on curriculum knowledge, subject specific pedagogy and practical skills have diminished dramatically.

When I trained to be a teacher in the late 70s and early 80s I was taught to deliver the entire TAS (then Industrial Arts) curriculum including HSC Engineering, Timber, Metal, Technical Drawing and still had time to study Plastics, Leatherwork and Industrial Design. Industrial Arts pedagogy was embedded in all courses so we were explicitly taught how to deliver content and skills, lecturers were highly experienced Head Teachers. Pre-service teachers undergoing teacher training in recent years have complained to me that they are not being sufficiently prepared to teach Technology education in schools.

Providing better support to pre-service teachers

Once university lecturers provided close scrutiny of students during practicums, there were no students at the institution so lecturers were available to undertake this crucial role. Scrutiny of student performance has now fallen on teachers who are not trained to provide feedback to students or address deficiencies. Supervising teachers are paid an allowance but still have a full teaching load and. Their role should be to assist the student and to demonstrate good practise and it should be up to a university expert to critique performance.

Supporting new Technology (and other) teachers to improve retention rates?

Possible strategies might include:

- Invest in our new teachers by appointing retired/retiring experienced teachers to schools on greatly reduced teaching loads or as super numeraries to mentor and provide support to beginning teachers.
- Provide technical support to TAS faculties. In DET schools there is currently an allocation of a kitchen assistant but no support to maintain tools, workbenches and vices, or to order, take delivery and store materials. In the large independent school I have been teaching in recently, there are 2.5 technicians to undertake these roles to free up teaching staff to teach.
- Fund schools appropriately so teachers have the technology to implement engaging programs. Once DET schools were sent new machines as they became relevant to the NSW curriculum, including fixed workshop machinery. In the 21st century all students should have access to advanced technologies such as laser cutters and computerised milling machines without the school having to re-direct funding from other programs or resort to fund raising by the P&C.
- The flexibility of being able to work anywhere in NSW has been lost over recent decades. When I began teaching in the 1980s it was commonplace to be appointed to a rural or disadvantaged school with an expectation that after a few years you could move on to a more desirable location thus making it a more attractive proposition. The NSW DET later introduced a points system but after 3 years in most schools the best you could realistically expect was an equally challenging school in another location. By contrast a neighbour of mine recently graduated as a paramedic, his first posting was to Collarenebri in rural NSW however within a few months he transferred to Orange and a year later he has moved to Ryde. The opportunities created by a mobile workforce are great not the least the sharing of expertise and strategies.

Raising the status of teachers?

- I work with young people who make pragmatic career choices and salaries figure prominently in these decisions. Schools have a classic hierarchical structure that means the vast majority of teachers cannot progress past the salary of a classroom teacher. After over a decade of 2.5% capped wage public service salary increases, a classroom teacher at the top of the scale can only earn \$117,060 but only if they teacher undertake an onerous approval process. Without this added level a classroom teacher can only earn \$110,000 pa. This compares poorly with experienced professionals in other industries.

I welcome the recent changes to the HALT Policy (2022). A recent article in the Sydney Morning Herald quoted a figure of only 274 Highly Accomplished or Lead Teachers across the three sectors in NSW, a paltry number in a very large workforce.

<https://www.smh.com.au/national/nsw/plan-for-tenfold-increase-in-top-teachers-within-the-next-three-years-20220513-p5a19l.html>

- Ironically teachers also have to train for longer to achieve these lower salaries. To achieve a Science degree you have to study for 3 years, to be a teacher you have to study for 5 years. The

training has been stretched out by a whole year since I graduated in 1981. Even an Engineering degree is only 4 years.

- How can we expect teachers to work as professionals in 2022 when we still don't even give them a laptop to develop and deliver lessons, write reports or send emails to parents? How can we expect teachers to work without 21st century tools and how does it look to students who are choosing NOT to study teaching?

In 2016 I went to work at NESAs and was given a laptop computer for my exclusive use on day one, likewise in 2021 I went to work at Knox Grammar School where I was also given a laptop computer for my exclusive use on day one. Soon I will return to the NSW Department of Education as a Senior Education Officer and I expect to be given a laptop on my first day to do my job. However if you are appointed as a teacher in NSW the best you can hope for is a few desktop computers in the staffroom and perhaps a computer in the classroom (but not in a workshop). Any lesson preparation you do at home will have to be done on a computer you have to buy yourself.

- Teacher workload is immense, a secondary classroom teacher is given approximately 20 minutes to prepare each hour of lessons, for primary teachers it is even worse. Even without the endless curriculum changes lessons need to be continually redeveloped to match the changing needs of different cohorts, and developments in technology and subject knowledge.

In my role as Technology Inspector I had the opportunity to present to the Parliamentary Enquiry into Fresh Food Pricing on changes we were making at NESAs to NSW Technology, Food and Agriculture syllabuses. I would welcome the opportunity to contribute further to this very important Parliamentary Enquiry into the Shortage of Teachers.

Kind regards,

Mark Tyler