



Science Teachers Association NSW

Submission to Parliamentary Inquiry
Into Teacher Shortages in NSW
July 2022

Background

The Science Teachers Association of NSW (STANSW) welcomes the opportunity to provide this submission to the 2022 Parliament of New South Wales Inquiry into Teacher Shortages.

STANSW is a teacher-led not-for-profit organisation seeking to advance science education in NSW through the provision of quality professional development, information and advocacy for primary and secondary science educators. A strong science education is essential so that every student understands the core concepts of science, and develops the ability to think scientifically.

As education systems, pedagogy and workforce demands evolve, STANSW continues to play a significant role in being both a voice for teachers and a change facilitator, supporting science teachers across NSW to smoothly adapt to change and to enabling the long-term endeavor of excellence in science teaching.

Current Challenges in the Teaching Profession

The work of teachers in NSW and Australia has changed significantly in recent years.

Findings from the [NSW Gallop Inquiry](#) in 2020 indicated that despite continued high levels of dedication and commitment from teachers, workloads and administration have continued to increase, while salaries have stagnated and time for lesson planning has decreased ([NSW Teachers Federation, 2020](#)). On a national level, recent data indicates that the pipeline of new teachers joining the teaching profession is inadequate ([AITSL, 2022](#)), and between 30 - 50% of teachers leave the profession in the first five years ([ANU, 2016](#)).

Out of field teaching has also risen in NSW and Australia. Recent estimates indicate that approximately 26% of year 7 –10 teachers are teaching subjects outside of their training; unfortunately, this figure is significantly higher for early career teachers, with 37% teaching out of field ([Australia Council for Education Research, 2016](#)). For STEM and science subjects in particular, subject matter expertise is critical, and out of field teaching presents a significant problem for teaching quality ([Luft et al. 2020](#)).

In preparing this submission, STANSW conducted a survey of science teachers in NSW to further elucidate the scale and impact of teacher workforce shortages in science faculties. The survey was shared with STANSW members and networks via email and social media. 43% of respondents were from Government schools, 32% were from Independent schools and 24% were from Catholic Schools. 63% of respondents were from the Greater Sydney region, while 37% were from regional or remote areas.

Key findings from our survey include:

- 48% of respondents reported that there was at least 1 permanent vacancy for science teachers in their school.
- 84% of respondents indicated that in the last week science classes had been taught by a non-science teacher.
- 57% of respondents reported that more than 1 science teacher in their faculty had less than 1 year of experience in teaching.
- 81% of respondents indicated that teacher shortages and the difficulty in sourcing relief teachers was a significant barrier to attending professional learning, which is required for maintaining accreditation.

Key feedback from Science Teachers

A number of themes emerged from our survey responses:

Burnout

Science teachers reported feelings of exhaustion and burnout due to workload and the increased demands of the profession. Several teachers reported intentions to leave the profession:

“I am leaving full time teaching in October this year - teacher burnout is real”

“Our roles are added to regularly and nothing is taken away to compensate for the extra requirements.”

“I’m exhausted. I spend 80% of my time doing admin and 20% of my time doing the job I trained to do. “

“I don’t plan on remaining in the teacher profession for much longer. I have had enough.”

“I have applied for (long service leave) twice in two years with no suitable candidates applying for the leave position. The school finally talked a retired teacher into doing the term’s work. Unfortunately this replacement teacher resigned after one day of online teaching during Covid lockdown. I cancelled my leave to take back the classes online”.

“I’m working so many hours at home in the evening I am just exhausted.”

Administrative load and lesson planning

Consistent with the findings of the 2020 NSW Gallop Inquiry, several of our survey respondents indicated that administrative work has increased significantly, resulting in less time for lesson planning:

“I would love to see that the administrative duties that we have to do is reduced significantly so that we have more teaching time. I don’t get time for recess or lunch break, left school exhausted.”

“The onerous amount of work... ticking boxes and the documentation required to prove accountability and capability. I know many very good teachers who have left the profession due to this.”

“I’d really just like to get on with my job instead of jumping through hoops and ticking boxes to say I’ve done some “professional development.”

“We need more time to plan, review and improve effective and engaging lessons NOT more administration tasks.”

“Teachers are time poor and the admin required to successfully fulfill the job description diminishes time for staff to prepare quality lessons.”

Workload resulting from teacher shortages

Several teachers reported an overall increase in their workloads due to teacher vacancies in their schools:

“In my KLA we try to cover classes - I have one teacher on leave (so far 9 weeks and no indication of a return in term 3) and my staff has been doing extra lessons so that the students have a Science teacher - 1 member has picked up 8 extra lessons a cycle and 2 have picked up 5 extra a cycle each while the rest of the staff have at least 3 extra lessons to cover this teacher. In addition we still pick up additional extra lessons if other science staff are absent.”

“Teacher shortage is real. Finding casuals is also a struggle. Over worked marking for assessments with missing teachers. All teachers are stressed and overworked.

“It is not just that classes are being covered by non science teachers but that we have to cover classes in other faculties / our own faculty in our planning time. This seriously affects my ability to plan for my own teaching and differentiation of lessons.”

Skills shortages and educational impacts

Several teachers reported difficulties in finding appropriately trained science teachers in their schools. Further, teachers expressed concern that these skills shortages were having a detrimental effect on educational outcomes:

“When a position becomes vacant at our school it has been very difficult to fill with quality science teacher candidates. Overwhelmingly, the position goes to teachers with little or no experience who must be trained from scratch. this has been a persistent additional pressure on existing experienced staff.”

“Hard to find qualified Science-trained teachers - what happens when the older staff retire? This will add to the teacher shortage problem and there are a very large number of staff retiring in the next 5-10 years”

“The 7-10 campuses have difficulty staffing science classes.”

“Teacher shortages have had a substantial impact on the quality and delivery of Science education to students. This is a result of lessons (both junior and senior classes) being uncovered by not only a qualified teacher but a qualified Science teacher when their regular teacher is absent. Students have therefore missed a significant amount of theoretical and practical lessons”

“Though all of my science staff are science trained we have zero science trained casuals in the pool. All but two of my teachers are also teaching other subjects outside science.”

Merged Classes

Teachers reported classes being merged due to inadequate staffing, and expressed concern that students were being left behind as a result:

“Because of the staffing shortages, whilst we may have a full compliment of trained teachers, if anyone in the school is away classes get merged. When classes are merged it is nearly Impossible to teach content, so the classes that have their teacher there but have another class join because their teacher is away are missing out and falling behind.”

“Students in merged class will struggle with adequate supervision and quiet space for learning.”

Summary

- Evidence shows that the current teacher shortage crisis in NSW has been building over a significant number of years. The pipeline of new teachers entering the profession is inadequate, and attrition rates are high.
- Out of field teaching is common, and particularly problematic in science and STEM subjects, which require significant subject matter expertise.
- Teachers are reporting high levels of dedication and commitment; however they are also reporting continued increases in administration and workload, feelings of burnout and intentions to leave the profession.
- Science teacher shortages must be addressed in order to ensure a future STEM workforce in NSW and Australia.

Recommendations

The Science Teachers Association NSW welcomes the opportunity to work in partnership with the Inquiry Committee to further consult on teacher workforce planning in NSW. The

Science Teachers Association NSW is a cross-sectoral organisation and is well-placed to advise on workforce and science education issues of concern.

To address the current teacher shortage crisis, we recommend implementation of evidence-based strategies that will attract and retain talented teachers in NSW. This includes:

- Significant reform focused on reducing administration and workloads of teachers
- Additional funding for schools to access lab tech and administration staff
- Investment in new technologies that will assist teachers with compliance and risk assessment (for example, *RiskAssess*)
- Further funding for Higher Education providers to ensure that teaching degrees are viable for universities to run, regardless of enrolment numbers. This will be critical in building an adequate pipeline of science teachers to support a future STEM workforce
- Development of recognition and retention strategies for teachers, including streamlined processes for accreditation and higher remuneration