

Australian Science Teachers Association Submission on Draft National Teacher Workforce Action Plan

The Australian Science Teachers Association welcomes the Government's focus on addressing teacher shortages. The issue is complex and has developed over a long time leading to the current crisis of recruitment and retention.

We broadly agree with the key outcomes of the draft action plan being

- Elevating the profession
- Improving teacher supply
- Strengthening initial teacher education
- Maximising the time to teach
- Better understanding future teacher workforce needs

However, the actions proposed are unlikely to deliver the intended outcomes of this plan and address the deep rooted issues that underlie teacher workforce shortages.

The following submission has been developed in consultation with representatives from State Science Teachers Associations with a representative membership across Australia.

Should you have any questions or wish to discuss this submission further, please contact Jane Powles, Executive Officer on

Elevating the Profession		
The actions proposed recognise the value teachers bring to students, communities and the economy.		
To what extent: Strongly disagree Somewhat disagree Neither agree nor disagree Somewhat Agree Strongly agree	Somewhat disagree	
Feedback on these actions	Action 1 - A targeted national campaign to raise the status and value the role of teachers. The proposed activity in action 1 is unclear and vague. The existing state campaigns referred to as examples are not achieving the desired outcomes and have limited reach with	



teachers across the sectors.

We see this action as being resource intensive and wonder of the cost effectiveness of such a strategy.

We recognise that any such campaign would take significant time and require ongoing resource commitment. Should this action progress, significant effort in determining the evaluation benchmarks will be important and ongoing evaluation essential. The Professional Teachers Associations would be ideal partners in the delivery of these types of campaigns. Specifically, as the Australian Science Teachers Association we would be well placed to support the government to raise awareness of the value of being a science teacher.

2. Creation of new Australian Teacher of the Year Awards.

We have concerns regarding the creation of national teachers awards in the absence of initiatives to address the more substantive issues being faced by teachers. This type of national recognition highlights the best and brightest and creates a binary relationship between awardees of which by nature there would be few, and the rest of the profession. Most of whom work hard and should be recognised for the value they contribute to society.

In Science we already have the PM Prizes which includes a prize for both primary and secondary teachers. The application process is onerous for the, already time poor, teachers. As these are competitive in nature those who are unsuccessful can feel a devaluation from their experience.

Everyday science teachers need to be highlighted not just the few receiving awards. There are some incredible stories related to science teachers who have supported students that have progressed into groundbreaking careers. We suspect that this is what is implied in Action 1.

3. Encourage members of the public to nominate teachers for Medals of the Order of Australia.

The Order of Australia Medals can be viewed as tokenistic without addressing some of the deeper issues being faced.



To be successful the teachers and the school communities would need champions who would step up and nominate them. This would require a concerted and strategic communication campaign.
4. Targets to increase the number of classroom teachers recognised as high achieving and highly accomplished.
The HALT system is not understood by the community and therefore will not address the value of the role or the status of the teaching profession in the community. The evidence required to become a highly accomplished teacher is onerous "It is just a gruelling set of hoops that teachers have to jump through to prove that they are good"
The HALT System at the moment seems to discourage experienced teachers as they do not want to do the extensive paperwork to 'prove' they are good. Maybe the HALT system requires a rethink, it is often contentious and linked to pay and tenured positions. The focus should be more on supporting excellence as opposed to collating evidence to prove accomplishments.

Improving teacher supply		
Will the actions proposed increase the number of students entering Initial Teacher Education (ITE), number of students completing ITE and the number of teachers staying in and/or returning to the profession		
To what extent: Strongly disagree Somewhat disagree Neither agree nor disagree Somewhat Agree Strongly agree	Somewhat disagree	
Feedback on these actions	5. More teaching places at universities in the right subjects and specialisations.	
	Evidence suggests that 30 - 50% of university enrollments drop	



during the course. This drop rate tends to be around the timing of the students' placements in schools. Further, that 50% don't last into their first 5 years of teaching.

This evidence suggests that in isolation the creation of teaching places at universities will not address the issue of teacher shortage. Given drop rates, investment in the creation of university places could result in a waste of money.

Additionally, the creation of university places does not necessarily equate to having the students applying for the places. The underlying motivation value still needs to be addressed as does the reason for drop offs, notably workload which is a more pressing issue and enhancing school culture, particularly for student and emerging teachers.

Should the Government progress with this action a longitudinal cost benefit analysis should be implemented from initiation of the program.

There may be some benefit to attract students, the program would need to be nation wide and should consider other motivations that would attract students to study education, include a support intervention during the time of school placements, this could be in the form of longer training placements that are designed more like a traineeship and include an ongoing mentoring program during the first five years of being in the workforce that supports reflective professional development.

The Professional Teacher Associations would be well placed to support students along this journey and have recently produced a Teacher Lifecycle Paper that may be of interest to this discussion.

https://asta.edu.au/wp-content/uploads/2022/04/Teacher-Professional-Lifecycle-Framework.pdf

Whilst we recognise the value in thinking about early childhood as part of the teaching continuum. We question the relevance of including it in this action plan.

Having said that, when considering specifically the discipline of science, we are aware that unhelpful stereotypes are embedded during the early childhood years. (Eg STEM is hard, STEM is for boys.). Given that a STEM unit should be part of



early childhood teacher training.

With respect to the right subjects, to support the Federal Government's agenda of powering the nation with innovation and technology. It is essential that a pipeline of inspired school students, student teachers, and science teachers are invested in and supported as part of this plan. ASTA therefore supports a specific workforce plan for science teachers that includes the creation of university places along with a support program that shepherds student teachers through their training and first five years of teaching. We would welcome the opportunity to work with the government on the development of this program.

Providing STEM educational support from the beginning of a child's education is critical to supporting the pipeline of future professionals driving government innovation and technology agendas. AITSL reports that pre-service education programs engage our primary school teachers in approximately 12 weeks of science education, an insufficient quantity. Pre-service primary teachers need greater support and resources to ensure students achieve in and stay interested in STEM.

6. 5,000 bursaries worth up to \$40,000 each to help attract our best and brightest to the teaching profession.

Given the Government's agenda of powering the nation through innovation and technology. We would advocate for a quota of these positions to be allocated to positions in the STEM disciplines.

We recognise the identification of minority groups in this action is to support equity in the teaching profession. We support this intent along with addressing the need for regional and remote communities.

7. 1,500 more places in the High Achieving Teachers program to encourage more professionals to switch careers to teaching.

In principle we support this action, noting our above points regarding the HALT program. We question the modelling that has been used to nominate a specific number of places. We would be concerned if the number of places proposed ends up being insufficient to address the need, it will likely exacerbate



the issue and/or be a waste of resources.

We question the efficacy of actions 6 and 7 to entice students into the profession especially when compared to other disciplines eg engineering.

8. Trial new ways of attracting and keeping teachers in the schools that need them most.

We support the trialling of new ways of attracting and keeping teachers in schools. Research undertaken by ASTA uncovered that up to 40% of teachers may be teaching out of their subject area.

Addressing this issue will require both increasing the motivation to enter the teaching profession and addressing blockers to retention. Notably:

- Increasing the social status of teachers
- STEM trained teaching positions should be remunerated in line with science industry positions.
- Reducing teacher workloads through reduction of administrative and non teaching tasks.

The Professional Teachers Associations are well placed to be working with the Government in the development and delivery of trials. Amongst other ideas the Australian Science Teachers Association would welcome the opportunity to work with the government on developing

- a support program for ITEs during their student placements to reduce the drop off rate
- A nationwide mentoring program delivered via state science teacher associations that draws on both teacher and science industry specific expertise focussed on the first 5 years of their careers.

As a general comment, we would like to see Professional Teacher Associations being recognised as part of the key stakeholders in any teacher workforce consultations.

Specifically the Australian Science Teachers Association has direct access to science teachers, from all sectors across Australia. We welcome the opportunity to work in partnership with the Government to greater understand the workforce issues specific to science teachers and the strategies to address shortages.



9. Prioritise visa processing for qualified teachers and prioritise teachers from State and Territory nominated visa allocations.

We advise caution on attracting teachers from overseas jurisdictions as an action to address teacher supply. We are aware this has been trialled before in various jurisdictions and anecdotal evidence suggests there are limitations with this strategy.

Should the Government progress with this strategy we recommend a longitudinal cost benefit analysis framework be developed as part of its delivery. Further that the skills and qualifications of candidates be scrutinised inline with Australian and state curriculums.

Strengthening initial teacher education

To ensure initial teacher education supports teacher supply and delivers classroom ready graduates.

To what extent:

Somewhat agree

Strongly disagree Somewhat disagree Neither agree nor disagree Somewhat Agree Strongly agree

Feedback on these actions

14. Potential pilot program. Greatest effort should be invested in this area.

10. The Teacher Education Expert Panel, led by the Vice-Chancellor of the University of Sydney, Professor Mark Scott, is reviewing initial teacher education and will recommend ways to boost graduation rates, and broadly ensure graduating teachers are better prepared for the classroom

We welcome the review of ITE that is being undertaken by Prof. Mark Scott, however, raise caution over the intent being to raise graduation rates in and of itself. Any review and recommendations needs to focus on ensuring high quality and committed graduates.



Areas of concern regarding teachers education includes:

- insufficient practical hours for ITEs
- university lecturers with limited and out of date connection with the curriculum and the classroom.
- University classroom activities that had limited relationship to reality.
- Lack of practical discipline based pedagogy

Further ideas to support ITEs

- Increase support and incentives for schools to take on practical students.
- Paid internships and other pathways, particularly for paraprofessionals
- Establish secondments for experienced school teachers to teach at universities at teachers' current pay levels and vice versa (university education lecturers to teach in schools at their current pay rate).
- Early teachers get supported with additional time off for the first few years of teaching for mentoring, professional development or reflective practices. (it is noted that at least 50% of new teachers leave the profession within the first 3-5 years)
- A mentor program that supports ITEs through to the end of the first 5 years. As mentioned above Professional Teacher Associations are well placed to deliver these mentor programs with their extensive networks across Australia.

11. Recognise previous study, work experience and skills that may be transferable to teaching.

We support the proposed action 11, however given the Government's agenda for technology and innovation believe that Science and or STEM should be specifically noted alongside the other listed subjects.

In the sciences we also acknowledge that the learning assistance and other support staff bring advanced skills and experience eg. Lab technicians and would have skills transferable for teaching.

In this context we ask that the Australian Science Teachers
Association be listed as a key stakeholder to work with
Universities to identify criteria for science teaching specific RPL.



12. Co-design actions to attract and retain more First Nations teachers.
Action 12. Is worthy and necessary. We support increased consultation with First Nations People and note the peak bodies listed in next steps. We would also encourage the Government to include Deadly Science as part of their consultations.
13. All teaching students will undergo an initial assessment of their literacy and numeracy skills in their first year to ensure they can receive targeted support if they need it.
We support literacy testing, however recognise that this could be problematic. As proposed in the plan we believe the testing should be done pre or early in their studies for ITEs and that significant support should be provided to ensure that there is a minimal standard of literacy and numeracy in graduating students.

Maximising the time to teach		
To improve retention and free up teachers to focus on teaching and collaboration.		
To what extent:	Somewhat agree	
Strongly disagree Somewhat disagree Neither agree nor disagree Somewhat Agree Strongly agree		
Feedback on these actions	14. Pilot new approaches to reduce teacher workload through a Workload Reduction Fund to maximise the value of a teacher's time.	1



We see this issue as being the most pressing and would support a reduced focus on other action areas to increase the focus and resources on this issue.

We support the piloting of specific approaches and would welcome ongoing transparency regarding the initiatives being trialled. Successful communication of the results is essential to ensure that lessons learned are able to be adopted in real-time across other schools and jurisdictions.

We advocate for specific funding to be allocated in forward estimates so that successful initiatives can be taken to scale across Australia.

Ideas tabled for the decreasing of teacher workload include:

- Reduction of teacher administrative load including student data collection through the recruitment of administrative assistants. Tasks could cover photocopying exams, organising paperwork for special needs and adjusted assessments, funding applications, results scanning, reimbursement applications.
- Removal of administrative red tape that has no impact on the student learning outcomes
- Reduction of teacher extra curricular tasks yard duty, bus duty, extra curricular activities, sport duty through the recruitment of school support staff.
- Time allocation for undertaking mandatory PD
- Swipe cards for roll call
- Re-consider the need for reporting, parent teacher interviews and mechanisms for communicating with parents.
- Implement a right to disconnect.

Schools are increasingly complex environments and teachers are increasingly required to to take on additional initiatives often dictated by government agendas. If we value schools we need to recognise the complexity of the roles that teachers undertake.

15. Build on work already underway to maximise teachers' time to teach, plan and collaborate and independently evaluate the effectiveness of these measures on teachers' time.



We support the intention to build on the work being undertaken in states and territories to reduce workload. Specifically, the focus in Victoria to ensure that the maximum face-to-face teaching time for primary, secondary and specialist teachers in Victoria is being reduced by one hour in 2023, and a further half-hour in 2024. We would support the Federal Minister for Education advocating for this with their fellow state and territory education ministers to ensure a nationally coordinated approach.

We welcome the focus on evaluating the effectiveness of these measures and would like to see transparent reporting of these evaluations.

With respect to evaluating any initiatives that are focussed specifically on supporting Science Teachers to reduce their workload, we welcome the opportunity to work with schools, sectors and the government on assessing the effectiveness of the measures with our constituencies.

16. Examine how to support implementation of the national curriculum and literacy and numeracy progressions

The Professional Teachers Associations are best placed to deliver any professional development in relation to the new curriculum. We welcome the opportunity to work with ACARA and AERO in recommending optimal supports for the implementation of the Australian Curriculum. The Australian Science Teachers Association has previous experience in this area and with state associations across sectors have extensive reach into the science teaching community. Teacher Associations led by professionals in their field of teaching are pedagogy experts and are ready to use their expertise to support the implementation of the new curriculum.

With respect to impact of the review cycle, the most onerous part of the process is the lack of adoption at the state level. We recommend that states adopt the Australian Curriculum thereby reducing the impact of the review, adoption and implementation cycles.



17. Each initiative in the next National School Reform Agreement will be subject to a Teacher Workload Impact Assessment.

We support the introduction of a Teacher Workload Impact Assessment. The Professional Teachers Association alongside the other stakeholders listed are well placed to work with the Government on the development of these assessments.

In considering workload impact we note a misconception, particularly in the general public, that teachers don't work during the school holidays and therefore have an easier workload than other industries. Where in fact with current teacher workload and the numbers of hours worked outside of school hours teachers are in a leave deficit. There is a suggestion to rename school holiday periods for teachers as student free planning time to address that misconception.

18. Identify the most effective use of initial teacher education students, teaching assistants and other non-teaching staff.

We support the action for AESOC to advise Education Ministers on the most effective use of teaching assistants. Please note our recommended actions above in relation to this issue.

We strongly support the intention to undertake an impact analysis on the initiatives in 2024 in relation to reducing teacher workload. We note the citing of some state strategies e.g. Quality Time Actions Plan where there is no evidence to suggest a reduction in workload.

Better understanding future teacher workforce needs

Improve the information available for teacher workforce planning.

To what extent:

Somewhat Agree

Somewhat disagree
Neither agree nor disagree
Somewhat Agree



Strongly agree	
Feedback on these actions	19. Develop and publish nationally consistent teacher workforce projections based on consistent standards, disaggregated at a regional level and by subject specialisation, to enable a national understanding of teacher demand.
	We support a committed effort to greater understand the issue of teacher workforce. Consideration in the analysis of this data should be given to the Government's national agenda to ensure there is an adequate pipeline of suitably qualified students moving into desired professions. Noting the Government's focus on innovation and technology, we would argue that greater consideration be given to the science disciplines.
	The Professional Teacher Associations would be well placed to assist the Government in this initiative.
	20. Develop and publish nationally consistent ITE graduate supply data, including disaggregated by subject specialisation and participation in ITE at the regional level, to enable a national understanding of teacher supply.
	We support a committed effort to greater understand the issue of teacher workforce through the lens of ITE graduate data.
	The Professional Teacher Associations would be well placed to assist the Government in this initiative.
	21. Establish a National Quality Framework to guide Teacher Regulatory Authorities in teacher accreditation and ensure nationally consistent standards for initial teacher education.
	We support the establishment of a National Quality Framework and nationally consistent standards for initial teacher
	education. We note that NSW has recently been through a significant review of their accreditation processes and that this caused significant upheaval across the sector. Careful
	consideration must be given to a reasonable framework for the implementation of any National Quality Framework.
	Of note we would like to draw your attention to the National Professional Standards for Highly Accomplished Teachers of



Science. - https://bit.ly/3Fe73Qy

22. Prioritise conditional or provisional registration to increase the supply of teachers.

It is unclear how this action addresses the objective of better understanding future teacher workforce needs. It is better placed in the objective related to supply. Having said that, we support the action to increase supply.

Further with respect to both action 21 and 22, we recommend the amount of work required for teacher progression be reduced. Notably the progression between proficient to highly accomplished should be time related not dependent on portfolios but reviewed by the schools. We recommend that highly accomplished should require a minimum of 10 years service.

23. Develop and publish comprehensive data about why teachers leave the profession and what careers they move into and what would improve retention, as well as why other career leavers choose teaching.

We strongly support the action to Develop and publish comprehensive data about why teachers leave the profession and what careers they move into and what would improve retention, as well as why other career leavers choose teaching and believe this action will address the objective of better understanding future teacher workforce needs.

Currently insufficient data is being collected and where it is collected it is siloed within the sectors.

Given that Professional Teacher Associations work across sectors we would be well placed to assist the Government in this initiative.

Anecdotally we are aware that workload and pay are the main issues for teachers leaving the profession. Along with classroom behaviour management and teachers not feeling safe in their workplace.



Better career pathways to support and retain teachers in the profession To improve career pathways, including through streamlining the process for Highly Accomplished and Lead Teacher (HALT) accreditation, and providing better professional support for teachers to retain them in the profession. To what extent: Strongly disagree Somewhat Agree Somewhat disagree Neither agree nor disagree Somewhat Agree Strongly agree Feedback on these actions 24. Develop and support career pathways which value teachers and reflect transitions in the Australian Professional Standards for Teachers. We welcome the intent to support career pathways, however note the risk of losing teachers to the management pathway at the expense of maintaining classroom teachers. This will require the promotion and improvement of working conditions for the classroom teachers. We caution against the movement of teachers from other subjects to science without ongoing and substantial scientific training of approximately a 3 year degree. The requirement to understand scientific thinking and be expert in a science discipline is essential to quality teaching in any of the sciences. We would welcome the opportunity to work with the jurisdictions and the sectors to support career pathway development. Given our Federated structure we have the capacity to engage in this work at a state and territory jurisdictional level and have produced Teaching Standards for Science Teachers. Further we have a vision to support STEM programs and networks across regional areas and would welcome the

opportunity to partner with Governments develop and deliver these services that would support career pathways.

We note this action comments only on specific programs in specific states. Any actions to deliver against this objective should be nationwide and relevant to all sectors.



25. Develop national guidelines to support early career teachers and new school leaders including mentoring and induction.

Professional Teachers Associations across Australia exist to support teachers across their lifecycle, including early career teachers. Across the federation we have robust logic models for the delivery of professional learning including mentoring, existing mentoring programs being delivered for both early careers and school leaders. Whilst we support the development of national guidelines it would be remiss if we were not included in these conversations.

Given the current operations of Science Teachers Associations across Australia we would be well placed to assist the Government in this initiative. Along with the delivery of any programs proposed to deliver against the final guidelines.

26. Improve access to high-quality First Nations' cultural competency resources to ensure teachers are better prepared to teach First Nations peoples in culturally safe ways.

Action 26 is worthy and necessary. We support increased cultural competency. We note the extensive work undertaken by Narragunnawali and recommend that efforts are directed to increase the scope and reach of this service as opposed to creating or developing anything new. Having said that we recognise the need for local level cultural competency, however believe the resources provided by Narragunnawali will support this endeavour.

Further we note the need for Employers to take on the responsibility of supporting cultural competency amongst the staff and supporting staff to ensure competency.

27. Streamline HALT accreditation processes to make it less burdensome for teachers to be accredited and incorporate recognition of equivalent qualification and certification processes.

We agree with this action and strongly support any reduction of the workload for HALT practitioners. Please see previous discussion. Noting we have reservations about its relevance to the profession.



28. Develop micro-credentials and expand the Quality Teaching Rounds (QTR) to enhance teachers' access to quality professional development.

Professional Teaching Associations are well placed to develop micro-credentials that are curriculum or classroom related. We would welcome the opportunity to tender.

Universities have in the past few years moved into the space of Teacher Professional Development, however have lacked the expert knowledge of the curriculum and the practical application of that within the classroom.