

Submission: Tasmanian 100% Literacy Alliance

Parliamentary Standing Committee of Public Accounts Inquiry into the Tasmania Government's continuing response to the COVID-19 pandemic.

July 2022

The Tasmanian 100% Alliance submission to the Inquiry focusses on the Terms of Reference which relate to the Government's return to school plan in response to the COVID-19 pandemic:

- the financial, social and educational impacts associated with measures implemented to support the return to school plan including (but not limited to) impact on:
 - o students and educational outcomes;
 - o the broader Tasmanian community and economy.

Given the importance of foundational literacy knowledge and skills in achieving successful school completion, participation in further education and training and engaging productively in society as an informed citizen over the lifespan, the Alliance is particularly interested in the Tasmanian Government's plan to ensure that all Tasmanian students were (and are) able to engage in their learning so that they meet the expected level for their age and grade throughout the pandemic and beyond. If not, the Alliance is interested in what measures the Government will implement to ensure students 'catch up' on lost learning over this period.

While the COVID-19 global pandemic could be considered an unprecedented scenario in the modern world, Australia's experience followed much of the developed world, and Tasmania's experience followed other states of Australia, particularly NSW and Victoria, providing the Tasmanian Government with insight into the impact of COVID-19 outbreaks on the education system.

The extensive learning from home requirements for students in NSW and Victoria during the COVID-19 outbreaks in 2021, combined with the case modelling undertaken for the Tasmanian Government, and the public health measures to stay at home and isolate as a case or close contact for a minimum of 7 days, should have meant that the Tasmanian Government was well-informed to prepare for learning from home and providing the opportunity for students to catch up on lost learning. While it may be argued that the Omnicron variant was far more transmissible than previous variants that the modelling was based on, there should have been plans in place to ensure learning was not interrupted which could be scaled accordingly.

Evidence suggests students at higher risk of lost learning during the pandemic include those:

- with low levels of English
- already at risk of disengaging from school
- with specific learning disabilities
- with home environments not conducive to remote and flexible learning
- enrolled in applied programs
- who need education and health and wellbeing supports at school but were unable to access them at home.

The Tasmanian 100% Literacy Alliance is particularly interested in what plans the Tasmanian Government had (has) to ensure learning opportunities are not lost for Tasmanian students

throughout the response to the COVID-19 global pandemic, particularly those in primary school where foundational literacy knowledge and skills should be learnt.

Furthermore, the Alliance is also interested to know:

- the average days lost per student (primary school and secondary school) as a result of public health requirements to isolate as a positive case or close contact due to COVID-19
- the average number of teaching days lost per primary school teacher as a result of public health requirements to isolate as a positive case or close contact due to COVID-19
- the average number of days lost for support staff (teachers aides, speech and language pathologists, educational psychologists, school nurses and social workers etc)
- the process for lesson planning in absence of classroom teachers and the extent of relief teacher usage
- the extent of compressed classes
- the projection for further classroom disruptions and the plan to ensure loss of learning is minimised
- The process for tracking student progress to ensure that students are achieving at the expected level.

The following sections explains why literacy matters and why the Tasmanian Government needs to urgently respond to the loss of learning experienced by Tasmanian students as a result of the COVID-19 global pandemic.

Literacy Matters

Even before the COVID-19 global pandemic, the decades-long decline in Australia's educational performance is associated with poor primary school outcomes, particularly in literacy. The proportion of students missing out on educational opportunities increases steadily between the early years and completing primary school. By the time they start year 7, around 28.4 per cent of Australian students have not acquired the core knowledge, literacy or numeracy skills required to access and engage in further educational opportunity.¹ While three quarters of a school cohort go on to complete year 12, only 6 in 10 students are engaged fully in employment, education or training by age 24.² Not completing Year 12 and not achieving well in school are predictors of later work and life outcomes which have serious long-term implications for productivity and equity, social cohesion and creativity.

It is likely that the loss of learning by Tasmanian students as a result of the COVID-19 global pandemic will be extensive and impact across a young person's lifetime, along with broader longer-term economic and social consequences.

¹ Lamb, S, Jackson, J, Walstab, A & Huo, S (2015), Educational opportunity in Australia 2015: Who succeeds and who misses out, Centre for International Research on Education Systems, Victoria University, for the Mitchell Institute, Melbourne: Mitchell Institute.

² Ibid.

Successful completion of year 12 is associated with prior achievement in literacy and numeracy throughout the schooling experience, more so than parental education or socio-economic background.³ It is year 9 academic results that predict year 11 and 12 performance.⁴

Further, it is sound writing skills, a key component of literacy, that is regarded as a critical prerequisite for employment and higher education in adult life by graduates, employers and higher education institutions.⁵ Writing skills are also correlated with year 11 and 12 performance.⁶ Underpinning proficient writing skills is the ability to use and manipulate multiple language conventions efficiently; spelling, grammar and punctuation, all taught and learnt in primary school.

Literacy predicts school completion

Several studies using multivariate analysis⁷ to predict academic performance have concluded that it is prior achievement in primary school which has the most influence on young people's overall educational outcomes, followed by parental education and/or occupation.

While there is a plethora of longstanding evidence that the early (pre-school) skills of language, cognitive development, communication and general knowledge are key predictors of future academic performance⁸ which has influenced policy development in the early childhood development sector, a large body of research also shows that the proportion of students not meeting the expected standard for their age increases steadily as they progress from the early years to primary school to secondary school.⁹ Not only do those that 'start behind, stay behind', the spread of student achievement more than doubles as students move through school with the majority of the learning gap developing between years 3 and 9, not before year 3.¹⁰

For this reason, the education response to COVID-19 global pandemic must focus on ensuring that any loss of learning in the foundational literacy and numeracy knowledge and skills are mitigated before they start high school.

³ Brendan Hough and Moshe Justman (2014), NAPLAN Scores as Predictors of Access to Higher Education in Victoria, Working Paper No. 22/14 October 2014, Melbourne Institute of Applied Economic and Social Research; Getenet, S., & Beswick, K. (2021). Predictors of children's achievement: analysis of the Australian National Numeracy Assessment Program. *Educational Assessment, Evaluation and Accountability*, 33(4), 591-620. Goss, P., & Sonnemann, J. (2016). Widening gaps: What NAPLAN tells us about student progress. Grattan Institute.

⁴ ABS (2014a) 'Educational outcomes, experimental estimates, Tasmania 2006-2013'

⁵ Daffern, T., Mackenzie, N. M., & Hemmings, B. (2017). Predictors of writing success: How important are spelling, grammar and punctuation?. *Australian Journal of Education*, 61(1), 75-87.

⁶ NSW Centre for Education Statistics and Evaluation, *Analysis of Writing*, 2021

⁷ Using variables such gender, indigenous status, language background, geolocation, sector, parents' educational background, parents' occupation status and children's prior achievement

⁸ Duncan, R. J., Duncan, G. J., Stanley, L., Aguilar, E., & Halfon, N. (2020). The kindergarten Early Development Instrument predicts third grade academic proficiency. *Early childhood research quarterly*, 53, 287-300.; Brinkman, S., Gregory, T., Harris, J., Hart, B., Blackmore, S., & Janus, M. (2013). Associations between the early development instrument at age 5, and reading and numeracy skills at ages 8, 10 and 12: a prospective linked data study. *Child Indicators Research*, 6(4), 695-708.

⁹ Lamb, S, Jackson, J, Walstab, A & Huo, S (2015), Educational opportunity in Australia 2015: Who succeeds and who misses out, Centre for International Research on Education Systems, Victoria University, for the Mitchell Institute, Melbourne: Mitchell Institute.; Goss, P., & Sonnemann, J. (2016). Widening gaps: What NAPLAN tells us about student progress. Grattan Institute; Adams, E. K., Hancock, K. J., & Taylor, C. L. (2020). Student achievement against national minimum standards for reading and numeracy in Years 3, 5, 7 and 9: A regression discontinuity analysis. *Australian Journal of Social Issues*, 55(3), 275-301.

¹⁰ Goss, P., & Sonnemann, J. (2016). Widening gaps: What NAPLAN tells us about student progress. Grattan Institute.

Analysis undertaken in 2021 by the NSW Government Centre for Education Statistics and Evaluation (CESE) found that Year 9 NAPLAN writing results were the strongest predictor of year 11 and year 12 performance, more so than reading, spelling, grammar or numeracy.¹¹ Writing ability is predicted jointly by spelling, grammar and punctuation, with spelling being the strongest predictor.¹² Further, proficiency in English is a strong predictor of mathematical achievement.¹³

A proficient writer is able to efficiently use and manipulate language conventions such as vocabulary, spelling and syntax when composing written text. Writing well requires deliberate choices at the word, sentence, paragraph and whole-text levels to meet the purpose of communication.¹⁴

Yet, year 9 Australian students' writing performance on the NAPLAN writing test has been declining considerably since 2011 for both male and female students. Several studies reveal a picture of accelerating negative change.¹⁵ The average student in 2018 performed nearly 1.5 years behind the average student in 2011.¹⁶ Not only does under-achievement in writing in year 9 impact successful school completion, it filters through to the Australian workforce, economy and broader society.

Poor writing is problematic for children and adults alike. To become effective writers in year 9, students must be proficient in spelling, grammar and punctuation, skills learnt in primary school.

However, primary school students' progress in writing lags behind that of reading because they are not receiving effective instruction in spelling and other language conventions. When the cognitive demands of writing are heightened by the arduous task of spelling, effective writing is compromised, also impacting confidence and motivation. As a result, many children fail to achieve standards of writing to support their personal and academic needs at secondary school and beyond.¹⁷ Students who experience difficulty with writing may be less likely to use writing to support and extend their learning to the wider curriculum. This impacts eventual school completion and the flow on effects to the economy and society.

¹¹Baker, J. (2021), Year 9 NAPLAN writing results the best predictor of HSC success: study, Sydney Morning Herald

¹² Daffern, T., Mackenzie, N. M., & Hemmings, B. (2017). Predictors of writing success: How important are spelling, grammar and punctuation?. *Australian Journal of Education*, 61(1), 75-87.

¹³ Getenet, S., & Beswick, K. (2021). Predictors of children's achievement: analysis of the Australian National Numeracy Assessment Program. *Educational Assessment, Evaluation and Accountability*, 33(4), 591-620.

¹⁴ Thomas, D (2020), Rapid decline and gender disparities in the NAPLAN writing data, *The Australian Educational Researcher* (2020) 47:777–796; Daffern, T., Mackenzie, N. M., & Hemmings, B. (2017). Predictors of writing success: How important are spelling, grammar and punctuation?. *Australian Journal of Education*, 61(1), 75-87.

¹⁵ Wyatt-Smith, C and Jackson, C, (2016), NAPLAN data on writing: A picture of accelerating negative change, *Australian Journal of Language and Literacy*, Vol. 39, No. 3,

¹⁶ Thomas, D (2020), Rapid decline and gender disparities in the NAPLAN writing data, *The Australian Educational Researcher* (2020) 47:777–796

¹⁷ Daffern, T., Mackenzie, N. M., & Hemmings, B. (2017). Predictors of writing success: How important are spelling, grammar and punctuation?. *Australian Journal of Education*, 61(1), 75-87.

Literacy and wages

Not only are literacy skills correlated with year 11 and 12 performance, but also income. Cognitive skills, as measured by international tests of mathematics, science and reading, are powerfully related to individual earnings, to the distribution of income and the economic growth of a nation.¹⁸

Research undertaken by the Productivity Commission in 2014 found that up to 40 per cent of the association between education and employment is attributable to literacy and numeracy skills and that an increase in literacy and numeracy by one skill level is associated with an increased likelihood of employment of 2.4 and 4.3 per centage points for men and women, respectively.¹⁹ The analysis also found that, regardless of highest level of educational attainment, an increase in literacy and numeracy by one skill level is associated with about a 10 per cent increase in wages for both men and women.²⁰

The report identified that proficient literacy and numeracy skills and knowledge are a critical foundation for developing higher order skills that contribute to a more productive workforce. The report further acknowledged that the increasing demands for improved productivity enhancing innovation, technology and adaptation in the economy are grounded in analytical and communication skills. These skills are underpinned by literacy and numeracy knowledge and skills acquired progressively throughout the schooling system, from primary school to secondary school.

These findings are consistent with a 2013 study undertaken by the National Centre for Vocational Education Research (NCVER) which found that both educational qualifications and literacy skill levels are positively associated with income and that income increases with literacy skill level, regardless of level of educational attainment.²¹ Further, the analysis found that inclusion of literacy skills lowers the estimated income effects of qualifications, reducing the effect by around two thirds for men and 80 per cent for women, concluding that both education levels and literacy skill levels are important in determining income. The NCVER report also commented that it is the skills of workers which explain a considerable part of their earnings that may not be attributable to formal education, so much so that within education levels, the labour market operates in such a way that more skilled individuals in literacy receive higher remuneration.

The NCVER report concludes that qualifications or credentials are not all-important in determining labour market outcomes and that it is the quality of the education and training systems in providing the requisite skills not just for positive labour market outcomes but for income.

Fiscal and social costs

The consequences of poor educational outcomes are not confined to the opportunities lost for an individual but have far-reaching economic, fiscal and social costs into the future.

¹⁸ Shomas, A. and Forbes, M. (2014), Literacy and Numeracy Skills and Labour Market Outcomes in Australia, Productivity Commission Staff Working Paper, May 2014; Thomson, S., De Bortoli, L., Underwood, C., and Schmid, M. (2019), PISA 2018: Reporting Australia's Results. Student Performance, Australian Council for Education Research

¹⁹ Shomas, A. and Forbes, M. (2014), Literacy and Numeracy Skills and Labour Market Outcomes in Australia, Productivity Commission Staff Working Paper, May 2014

²⁰ Ibid.

²¹ Chesters, J., Ryan, C., & Sinning, M. (2013). *The returns to literacy skills in Australia*. National Centre for Vocational Education Research.

For an individual, the costs relate to the opportunity for occupation prospects, secure employment, adequate income, career pathways and job satisfaction as well as health and well-being.

The implications for the economy are foregone productivity potential, economic growth, innovation and wealth accumulation.

The fiscal costs include reduced tax revenue as well as increased public expenditure on health, welfare, crime, housing, income support and associated services. This results in opportunity costs for the government in expenditure planning, or requires increased taxes.

Every young Australian student who fails to complete Year 12 or equivalent qualifications, or every young person who is not able to actively engage in work or study after they leave school, produces a direct cost for the government through lower tax revenues, higher dependence on public health, welfare and associated services as well as higher costs on crime and the law enforcement system²².

In its 2017 *Counting the costs of lost opportunity in Australian education*, The Mitchell Institute created a lifetime economic and social profile model for early leavers who were likely to remain lifetime early leavers²³ in comparison to those who completed Year 12 or equivalent qualifications, and for disengaged young people²⁴ in comparison to other young people. It then used these models to calculate the economic and social costs over a lifetime of poor educational outcomes at the individual and cohort level for annual and lifetime periods.

The profiles are expressed as present values at age 19 for early leavers and at age 24 for disengaged young people and are estimated in 2014 prices. Estimates of annual and lifetime (working age) costs are derived in the areas of health, government assistance, crime, earnings and employment.

The report also notes that the cost estimates should be considered as very conservative, and that the actual costs to the nation from early leaving and disengagement are likely to be much larger than those estimated.

Using 2014 data, the report found that around 12 per cent of the 19-year-old population would be lifetime early leavers (15.7% for males, 8.1% for females). Based on their model, the fiscal cost to the government for that cohort equates to \$12.6 billion over their lifetime. The social costs over a lifetime equate to \$23.2 million.

Appropriate and urgent response

The impact of lost learning in literacy knowledge and skills for young Tasmanians is likely to have a significant long-term effect on school completion and participation in further education and training and future employment as well as being informed and active citizens over their lifetime.

This loss of learning warrants an urgent response beyond what the Tasmanian Government is already doing to respond to low, and declining literacy skills in the State, through the appointment of a Literacy Advisory Panel. There needs to be an urgent and proactive response, similar to that undertaken by the Victorian Government with the Tutor Learning Initiative. However, it is important

²² Lamb, S., and Huo, S., (2017) *Counting the costs of lost opportunity in Australian education*. Mitchell Institute Report, 02/2017, Centre for International Research on Education Systems, Victoria University

²³ The model includes only those early leavers aged 19 who were likely to remain lifetime early leavers

²⁴ Disengaged young people are defined as those not in full-time work or study at age 24 and not likely to be in full-time work or study for more than half of their adult life.

that any response undertaken by the Tasmanian Government is informed by the evidence-base in the Science of Learning.

The Victorian Government responded to the interrupted learning by investing significantly in a Tutor Learning Initiative²⁵.

In 2021, the Victorian Government invested \$250 million towards the Tutor Learning initiative which enabled all Victorian government schools and qualifying non-government schools, to engage over 6,400 tutors to provide students, who struggled most during remote and flexible learning in 2020, with extra targeted learning support in 2021.

In October 2021, the Victorian Government invested an additional \$230 million of funding to extend the Tutor Learning Initiative for the 2022 school year to provide school students with targeted learning support.

This level of support is vital to ensure that any gaps in foundational literacy skills are closed for all children.

Summary

It is unclear whether the Tasmanian Government had a plan to ensure students were able to remain engaged and achieving in learning, particularly in primary school, at the start of the school year in 2021.

The COVID-19 global pandemic is likely to have on-going implications for engaging in learning for Tasmanian students.

This loss of learning warrants an urgent response beyond what the Tasmanian Government is already doing to respond to low, and declining literacy skills in the State, through the appointment of a Literacy Advisory Panel.

Lost learning will need to be proactively addressed through significant and meaningful investment to ensure young Tasmanians are meeting the expected level for their age and grade, particularly in literacy given it is foundational to all other learning opportunities.



²⁵ <https://www.vic.gov.au/tutor-learning-initiative>