



**Hon Sue Ellery MLC
Minister for Education and Training
Leader of the Legislative Council**

Our Ref: 61-20031/2

Mr Andrew Laming MP
Chair
Standing Committee on Employment, Education and Training

Email: ee.reps@aph.gov.au

Dear Mr Laming

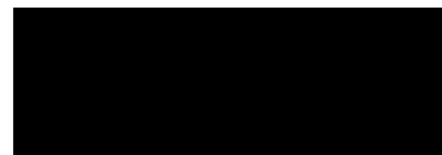
Thank you for your letter dated 13 February 2020 regarding the *Inquiry into Education in Remote and Complex Environments*, and seeking a response to specific questions provided with your letter.

As you would be aware, the Western Australian Government submission was forwarded to the Committee by email on 17 February 2020.

Please find attached the responses to the additional six questions as requested.

I look forward to reading the report findings at the conclusion of the Inquiry.

Yours sincerely



SUE ELLERY MLC
MINISTER FOR EDUCATION AND TRAINING

26 FEB 2020

✓ Att.

Inquiry into Education in Remote and Complex Environments

Western Australian response to specific questions from the Committee Chair

State/territory initiatives to prevent decline in STEM (especially females)

Please refer to pages 20, 26 and 27 of the WA Government Submission.

Additional information:

- *STEM Enterprise Schools Program and STEM Mentoring Program*
The Department of Jobs, Tourism, Science and Innovation is providing \$1.9 million to deliver the STEM Enterprise Schools and the STEM Mentor Schools program. The initiative focuses on developing whole-school approaches to building students' STEM capability, building enterprise skills and developing future-focused career pathways between primary and secondary settings. During the recent workshops, up to 60% of the participants were female.
- *Innovation Partnership Schools*
During 2018, 27 Innovation Partnership Schools, including *DigiTech* Teacher Development Schools, worked with other schools and community, industry and education bodies in raising awareness and aspiration in school communities about:
 - the diverse range of opportunities for girls in STEM careers;
 - new digital platforms for communication across the school community;
 - new ways of teaching STEM; and
 - virtual reality expeditions to connect students in rural and remote locations to the world beyond school.In March 2019, the initiative expanded to 68 schools. Up to 70% of the participants at the workshops have been female.
- *Innovation Showcase 2019*
On 27 and 28 November 2019, the Department of Education collocated its Innovation Showcase 2019 with Seven West Media's Resources Showcase at the Perth Exhibition and Convention Centre. An industry panel of seven women discussed how well education is engaging girls in STEM. Sixty percent of the participants at the workshops have been female.
- *Teacher Development Schools (TDS)*
Seven *DigiTech* TDS deliver subject-specific support for the delivery of Digital Technologies curriculum to colleagues in schools across the State. Nineteen other TDSs provide discipline-specific support in other STEM learning areas. TDSs provide professional learning in STEM for female teachers and actively encourage girls to engage in STEM learning.
- *Professional learning support for Digital Technologies*
The Department is implementing a range of strategies to support teachers in the implementation of the Western Australian Curriculum: Digital Technologies. These include online resources and the development of the 16 Teachers Can Code (TCC) learning modules tailored for the Western Australian Curriculum: Digital Technologies by the University of Sydney. There are 110 lead teachers who have received training to deliver TCC modules across the State and 62% of the lead teachers are female. Since March 2018, lead teachers have delivered 436 professional learning events to 5 349 participants.

- *STEM Learning Project*
The Department is funding Scitech to develop integrated STEM teaching and learning resources, as well as online and face-to-face professional learning. Nine resources are currently available to all Western Australian schools. More than 110 professional learning workshops have been provided, attended by over 2 800 teachers and school leaders.
- *Little Scientists*
The Little Scientists professional learning program (FROEBEL Australia) is currently being delivered by 80% female educators. The program builds capacity of early childhood educators in developing STEM capabilities and inquiry learning skills in the early years.
- *School Pathways Program (SPP)*
The Commonwealth Government-funded Marine Industry SPP supports the delivery of initiatives to help reduce skills shortages in defence industry. Since 2010, the SPP has continued to successfully initiate, facilitate and implement initiatives that have resulted in increased involvement of girls in STEM pathways.
- *Girls in STEM in schools*
Schools host events and/or run programs led by passionate female educators to engage girls in STEM at school, network or cluster level. These include:
 - annual STEM Girls Day Camp;
 - participation in the Robogals Science Challenge;
 - Joseph Banks Secondary College holding a Mother's Day evening event for Year 9 and 10 girls and their mothers to celebrate mathematics; and
 - Aboriginal girls in STEM program.
- *External Services*
STEM-related opportunities for female students are promoted through the Department's Connect communities. Examples of programs include:
 - Girls Programming Network at Edith Cowan University;
 - Girls in Engineering at Central Institute of Technology and the University of Western Australia;
 - First Lego League robotics at Curtin University; and
 - CSIRO's STEM Professionals in Schools.
- *Promoting STEM*
On the Department's YouTube Channel, there are a number of videos that promote STEM participation and careers, highlighting female STEM educators. In 2019, the Department commissioned the production of a suite of videos promoting the schools' stories in STEM education.
See https://www.youtube.com/user/DeptEducationWA/videos?disable_polymer=1

State/territory initiatives to monitor/manage social issues associated with younger students entering high school a year earlier

Year 7 students have been in secondary settings in Western Australia since 2015. In the lead-up to that time, a project team was established to successfully transition Year 7 students to secondary school and ensure that all school staff were supported to adjust to the transition processes. Leadership teams from primary and secondary schools initiated a higher level of cooperation and shared planning to implement the change.

Information packages and online resources were developed for schools, including potential opportunities and considerations that could assist transition planning, and available curriculum and student services support.

Professional learning support included classroom management strategies, whole-school planning and student wellbeing. Parent information resources were made available, and schools held information evenings, orientation events and other activities designed to inform parents about secondary school programs and requirements, and to make the move as smooth as possible for students. All Western Australian public schools continue to be supported and have access to a range of resources designed to strengthen the transition of students entering high school a year earlier. These include:

- student services support package: designed to assist schools to identify the considerations and opportunities relating to the transition of students from primary to secondary school, which will inform the design of the transition program;
- primary and secondary school operational planning tool: focuses on co-planning between schools and the communication and support for parents and students;
- parent and student surveys: designed to provide feedback to the primary and secondary schools to inform pre- and post-transition planning; and
- transition reflection and planning chart for staff: the chart is designed to identify risks and actions associated with transition. It focusses on eight areas: leadership, transition teams, shared understandings and practices, communication, orientation program, students' engagement and wellbeing, parents, and the community.

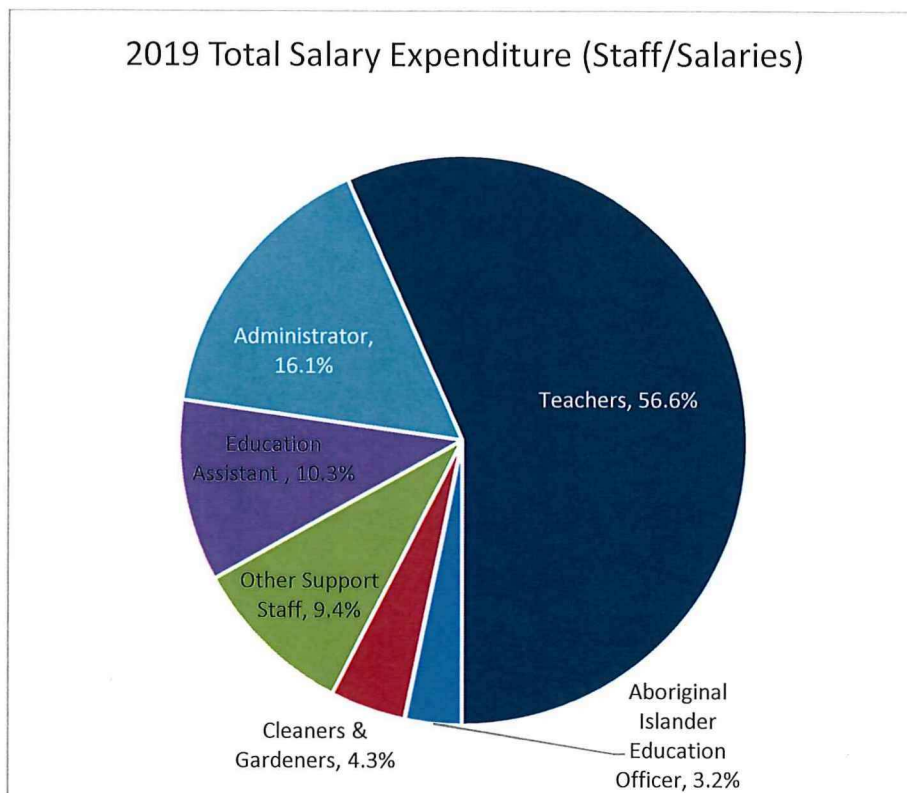
Proportion of budget devoted to staff/salaries and in-class teaching salaries.

The student-centred funding model (SCFM) was implemented in 2015 in Western Australia and sets the prices and parameters that determine funding for all Western Australian public schools with enrolled students. The SCFM supports greater local control and decision-making by principals and their school communities in determining how funds are spent. Schools operate with a one-line budget, which provides greater flexibility to develop educational programs and staffing profiles that best suit the needs of the school community within the school's budget parameters.

The total commitment of salary expenditure within the one-line budget is a school-based decision and will vary school by school, and year by year. Class sizes are also determined locally and are informed by student needs and award conditions.

In 2019, SCFM funding was provided to the 134 remote and very remote Western Australian public schools. For these schools, 84.2% of the SCFM budgets was dedicated to staff/salaries in 2019, and 47.7% was devoted to in-class teaching salaries. In addition, 11.4% of SCFM budgets was spent on education assistants and Aboriginal and Islander Education Officers providing support to students.

The pie chart below shows the proportion of the total salary expenditure in 2019 in each employee group.



Number of home-schooled children by age; and proportion of total

In Semester 2, 2019, 3 940 students in Western Australia were home-schooled. This represents 0.9% of the total number of full-time Pre-primary to Year 12 students (all schools) in Western Australia in Semester 2, 2019.

The table below shows the number of home-schooled students by region, as the focus of the inquiry is on remote and complex environments. It is not possible to provide the data by student age, as the data was not broken down into student year levels or ages when collected.

Table 2: Number of Western Australian students registered for home education, by region

Region	Number
Goldfields	105
Kimberley	32
Midwest	125
North Metropolitan	1 236
Pilbara	58
South Metropolitan	1 635
Southwest	584
Wheatbelt	165
Total	3 940

Any work around changing semesters to increase mid-year breaks by a week

There has been no work done to change semesters to increase mid-year breaks by a week in public schools in Western Australia.

Role of technology to ensure remote and regional young people access educational opportunities (e.g. video conferencing etc.) and funding provided

Please refer to pages 2, 7, 26 and 27 of the Western Australian Government submission.

Additional information:

The School of Isolated and Distance Education became a registered training organisation at the end of 2019 to increase student access to options in regional and remote areas through direct delivery, auspicing partnerships with schools and/or a blend of these modes through a training-specific online learning environment.

Schools receive funding through the SCFM and operate with a one-line budget, which supports greater local control and decision-making by Principals and their school communities in determining how funds are spent. For example, schools may target funding they receive through the SCFM toward the use of technology in the delivery of education. The school-level expenditure dedicated to technology is not quantifiable as there is no standardised reporting on this expenditure item.