

# 2020 Annual Report:

## The Australian Science & Mathematics School

The Australian Science & Mathematics School is a category 5 school in the southern suburbs of Adelaide. In 2020 we had 354 students. The student population includes approximately:

- 15% school card holders,
- 31% students with English as an Additional Dialect
- 13% students with disabilities and
- 1.4% Aboriginal students.

## Overview

### Site context and highlights

As you will see in this Annual Report there have been many highlights and outstanding achievements during 2020 ASMS school year, all made possible through the commitment to extraordinary learning experiences by our staff, students and our school community. These included:

- 5 students were accepted into the highly regarded Space Industry Work Placement program which ran over the summer break
- 100% of our 2020 graduate student's who applied for a university pathway were successful in being offered a place with 93% offered a position in a tertiary course of either their 1st or 2nd choice. 85% were offered STEM related courses, 15% in an Arts program.
- 25 students successfully completed their ASMS Portfolio Accreditation Tertiary Entrance (PATE)
- 25 students completed a first year University Education subject at Flinders University as part of their year 12 studies
- Successful implementation of the new learning management system, DayMap, enabling staff to continue with their planning and support for students with little disruption.
- During a year where COVID 19 restrictions prevented face-to-face meetings for much of the year, ASMS staff still managed to facilitate 1,027 hours of professional learning for over 1155 educators as per the Department of Education's charter for our school

In 2020 we continued our focus on building capacity of ASMS staff to access, analyse and use learner data to inform learning and assessment designs, plans for learning interventions and supporting our monitoring and tracking of student's growth, challenge, achievement, engagement and equity. Working with students and their families we aimed to support them in understanding the range of data we use to support learning with information sessions, newsletter articles and scaffolds for student Learning Conversations and report comments. We have provided time in whole staff professional learning sessions for staff to study key data sets related to their classes and to learn how to interpret data from sources including PAT R & M.

### Governing council report

Chairperson Peter Amerl, Flinders University representative Ingo Koeper, students Vasil Samardzhiev & Amelia Evans staff member Tricia Williams and community member Michael Pittolo joined elected parents at our monthly meetings providing governance for our school.

Key activities of the 2020 Governing Council included:

- participating in the ASMS Open Nights which included a virtual event
- receiving regular reports and providing feedback about the progress of curriculum development, including the Central Studies, Learning Studies, changes to our year 12 subject offerings
- receiving progress reports about the partnership with Flinders University
- receiving regular reports about the progress of the ASMS 4 Strategic Directions and School Improvement Plan

- approving the 2021 Student Free and School Closure days
- overseeing the financial position of the school, monitoring fee payments and approving debt recovery of school fees as required.

Of particular interest to the GC was finding ways to support parents of students during COVID-19 restrictions. Governing Council was able to meet as per the planned schedule using combination of online and face-to-face meetings. Member's perspectives on how the school was managing the impact of COVID-19 on the teaching and learning program informed approaches to our communication to the broader community and support put in place for our students.

A continuing interest of the GC is supporting parents new to the school. A series of Parent Information events were planned as per the previous year with a core group of parents involved in the facilitation of these sessions. While COVID-19 restrictions meant not all sessions could be held, the sessions that did run attracted over 60 participants.

Discussions related to re-branding and promotion of the ASMS to the broader community enabled valued input for Governing Council members.

### Improvement planning - review and evaluate (school)

A variety of school self-review process were used in 2020 in order to monitor the impact of learning programs on students' academic achievement, growth, engagement and participation. Focus Groups, attendance records, literacy levelling process, academic results data and student end of semester report comments were among the key data sources used. We have used data at the individual and cohort level to inform our learning design so we can provide targeted learning experiences for our students. In 2020, opportunities for students to co-design their own learning programs and their presentation of evidence of this learning expanded significantly with Central Studies providing an option for students to work in partnership with teachers and other students to do this. Our student Changemakers group continued to work with us to identify areas of the curriculum that would allow for more agency. Discussions between students and staff resulted in a commitment to making explicit connections across several of our year 12 subjects in 2021.

The General Capabilities continue to be at the centre of ASMS learning and are evident in all planning and assessment tasks. The Central Studies were mapped against the General Capabilities as a lens to ensure that all students have many opportunities to develop the dispositions and competencies that will support them to be successful. Students showcase their capability development through the General Capabilities e-Portfolio and their Learning Conversations held with families which were only able to be held once in 2020 due to COVID restrictions.

Leaders were involved in regularly analysing data sets related to student learning which they then used to work with their teams to identify areas for improvement. Using our new learning management system (LMS) DayMap, we were able to better track student improvement against specific aspects of their learning over the year. This proved highly insightful and in 2021 we will trial monitoring the effectiveness of teacher feedback in improving student learning and focus on how to provide focused, timely effective feedback to students.

As a result of students indicating they wished to better understand and monitor how they were progressing and growing as learners we worked with staff to support them in accessing and analysing a range of key data sets which enabled them to work with students in setting learning goals. Initial findings indicate students valued this and we have plans to continue in 2021.

The ACER undertook an evaluation of our professional learning services in order to support future planning. The Report acknowledged that the ASMS is seen as one of the only professional learning providers who can help teachers be learning designers, due to the wealth of knowledge and expertise and willingness to be collaborators in the approach to improving curriculum design and teaching and learning more broadly. Participants valued the ASMS broad understanding of the

education narrative and understanding of how to support effective learning for teachers. Recommendations of the Report are being considered in planning for 2021 and beyond.

COVID 19 restrictions impacted our ability to offer planned face-to-face Professional learning programs, we reviewed how we could meet our targets for 2020. This reflection led to prioritising online asynchronous and synchronous formats. A series of White Papers have been developed by ASMS staff including Interdisciplinary Curriculum design; STEM teaching and learning; Digital Fluency; Challenge Based Learning; Evidence of Learning; Pedagogies for Challenge and Stretch; General Capabilities and Intercultural Understanding designed to support educators to engage with our work. In addition we launched the Ignite & Impact program with our first event featuring Dr Helen Street involving 150 registered attendees, 60% attending online for this event. Participants reported they valued the opportunity to connect with lead thinkers in the area of research related to inclusion, wellbeing & creating safe environments. Plans are in place to enable educators to personalise their professional learning. We look forward to shaping and facilitating these during 2021.

## Improvement planning

This year, we have particularly focussed on promoting the continuity of learning for our Aboriginal Learners. Transition points were identified as being risk-times for the achievement for some of our Aboriginal students and significant work was undertaken with students and families to plan for successful transition. As such, our Aboriginal Learners have been supported through targeted, personalised approaches that have supported them to work towards or achieve their preferred post-school pathway. Two year 12 students have been supported to gain entrance to their preferred university option outside the ATAR process with significant support from the school and the intended university. One year 11 student has been supported to complete a Football Academy Certificate III in Fitness while successfully completing stage 1 and will continue to year 12 in 2021 to further improve their readiness to achieve their preferred pathway in 2022. Another year 11 student is transitioning to Queensland with her family and discussions with her family indicate that they are well placed to support her in this transition. Parents were included as partners in all these interactions to ensure that the learning and future pathway outcomes for our Aboriginal learners were paramount in every decision made.

Data for our Aboriginal Learners has been provided to Learning Studies teachers and they have monitored this. Our teachers have differentiated curriculum and assessment as required to support our Aboriginal Learners to be successful in their learning and outcomes, especially literacy and numeracy. This has been achieved through extensive consultation with the ASMS Coordinator: Inclusion, and specific learning plans have been developed.

## South Australian Certificate of Education - SACE

### SACE Stage 2 grades

#### Percentage of grades that are C- or above for attempted SACE subjects (SEA)

| 2020  |
|-------|
| 97.9% |

#### SACE Stage 2 grade distribution

| Grade | 2020  |
|-------|-------|
| A+    | 2.5%  |
| A     | 8.8%  |
| A-    | 16.3% |
| B+    | 17.3% |
| B     | 15.2% |
| B-    | 11.9% |
| C+    | 12.6% |
| C     | 8.0%  |

| Grade | 2020 |
|-------|------|
| C-    | 5.3% |
| D+    | 1.8% |
| D     | 0.2% |
| D-    | 0.2% |
| E+    | 0%   |
| E     | 0%   |
| E-    | 0%   |
| N     | 0%   |

## SACE completion

| 2020 |
|------|
| 98%  |

## Percentage of year 12 students undertaking vocational training or trade training

| 2017 | 2018 | 2019 | 2020 |
|------|------|------|------|
| 10%  | 10%  | 12%  | 4%   |

## Percentage of year 12 students attaining a year 12 certificate or equivalent VET qualification

| 2017 | 2018 | 2019 | 2020 |
|------|------|------|------|
| 97%  | 98%  | 96%  | 98%  |

## Performance and attendance

### School performance comment

The ASMS school community is committed to the success of every learner and we see this success as multifaceted, evidenced by not only achievement against Australian Curriculum and SACE curriculum standards but also development of general capabilities and strong, confident empowered learners. We continued to work with our students to provide evidence of their growth in relation to the AC General Capabilities using a variety of measurement processes including development of rubrics, student e-Portfolios and participation in Learning Conversations. Our year 10 students were supported to compile a portfolio demonstrating ongoing evidence of their growth and achievement in numeracy and the mathematics learning area across the interdisciplinary curriculum. Teachers continued to support students in identifying and collecting evidence of their growth across the General Capabilities and building portfolios, with 25 students successfully completing the Portfolio Accreditation Tertiary Entrance (PATE) as pathway into university programs. A student-led initiative to improve the ongoing student-led collection and compilation of growth in capabilities was trialed in Semester 2 and will reinvigorate our portfolio process for 2021 allowing students to have greater direction over their data and engage with the SACE agenda. Our monitoring of student learning and wellbeing resulted in a variety of interventions successfully implemented to support students achieve success at Australian Curriculum and SACE levels. 4 ASMS year 12 students received SACE Merit Awards in at least one subject and a further 7 received A+ results in a subject. Our results demonstrate an improvement over 2019 with the percentages of grades in the C band decreasing and those in the B band increasing despite the impact of COVID-19 on the learning and assessment program, which follows from our school's focus on supporting students to understand and monitor their growth and transfer their learning across subjects. 25 Year 12 students undertook a University Extension Subject (UES), with 39 of the grades achieved in both semesters either Distinction or High Distinction. This indicates that our reported A band Stage 2 results are likely to be an underrepresentation of our students' academic performance, as these high level (A+ equivalent) UES results replaced Stage 2 subjects for these students and are not reported in our grade distributions. 17 of our year 11 students obtained conditional offers to Flinders University through the Assessment Centre process.

### Attendance comment

We have continued to work on improving tracking and follow-up procedures, supporting staff to work with students resulting in a close connection between attendance follow-up and student wellbeing support. This has directly addressed both student punctuality and longer term attendance difficulties and strengthened the oversight provided by our Learning Studies teachers in collaboration with families. Our transition to DayMap, our new learning management system, has been smooth with teachers following up on absences at both a day and session level.

This was especially important during COVID-19 restrictions and in supporting students to return to learning at school. Our absence rates for 2020 were higher than usual due to the large number of absences caused by COVID-19 associated closures and family decisions. Coming into Term 2 we had around 3% of our cohort in situations requiring them to remain home for longer periods. We implemented a direct contact and support process for these students complementing our support for students with limited connectivity and had all students back on site by the end of Term 2.

## Behaviour and client opinion

### Behaviour support comment

There have been very few incidents of bullying or violence reported in 2020. Our 2020 Term 1 Wellbeing Engagement Collection data indicated that 1% of respondents indicated physical bullying, 2% verbal bullying, 2% social bullying and 1% cyberbullying which is consistent with our year-on-year data for bullying . This continues to be well below reported data for public schools in South Australia.

There was one suspension for threatened or actual violence and two for threatening the safety of wellbeing for others. In all instances, parent meetings were held with learning agreements constructed and there were no subsequent issues.

## Client opinion summary

38% of ASMS families provided a response to the Parent Survey in 2020. Information provided through this survey enable us to identify what is working well for our parents and families and key areas for improvement. 26% responded that they would like more help from the school with their child's learning and would appreciate useful tips on how to help their students learn at home. This aligns with the Governing Council's interest in facilitating information sessions for parents and is scheduled to occur again in 2021.

Central Studies leaders seek feedback from students throughout the year, often in the form of surveys. Students are asked to provide feedback and their perspectives on various aspects of the learning programs which is then analysed by teaching teams to make adjustments and improvements.

Our Wellbeing Engagement Collection report indicated an overall high level engagement for our students, with all respondents indicating high (86%) or moderate (14%) engagement level with teachers and similar levels for school climate. Interestingly the collection showed that our students are not generally pleased with the quality of the work that they submit. This has ramifications for how we present and scaffold learning in our classrooms and will be a focus of 2021 professional learning for all staff.



## Screening history

### Relevant history screening

The ASMS has delegated non-teaching staff to maintain and manage the oversight of Working With Children Check's (WWCC). As per The Department for Education guidelines, we maintain a register for persons working or volunteering on site. This includes our cleaners, teaching and non-teaching staff, contract staff, tutors, volunteers, pre-service teachers, TRT's, cultural study tour homestays and community members as required. The school ensures records are maintained securely electronically and in 'hard copy'. The process for teachers renewing their teacher registration has changed in relation to the WWCC, which is now a separate part of the TRB renewal process. Teaching and Non-teaching staff work collaboratively to renew their clearances. The school underwent a successful WWCC Audit late 2020.

## Financial Statement

| Funding Source Amount | Amount (rounded to the nearest \$) |
|-----------------------|------------------------------------|
| Grants: State         | \$6,838,570.00                     |
| Grants: Commonwealth  |                                    |
| Parent Contributions  | \$487,301.00                       |
| Fund Raising          | \$5123.00                          |
| Other                 | \$105,615.62                       |

## 2020 school annual report: Tier 2 funding report\*

\*Tier 2 funding provides additional resources to support students who are unlikely to obtain the desired outcomes without further support.

| Tier 2 funding section                   | Tier 2 category (where applicable to the site)   | Briefly describe how the 2020 funding was used to improve the relevant Standard of Educational Achievement (SEA) outcomes   | Outcomes achieved or progress made towards these outcomes   |
|--|--|---|---|
| Targeted funding for individual students | Improved wellbeing and engagement  | TRT employed to monitor and support students who struggled to continue engaging with their learning during and post COVID impacted periods.<br><br>Teacher employed to support weekly personalised tutorial program.<br><br>Youth worker employed to monitor and intervene as appropriate to support student's engagement in learning programs.   | Students remained connected to their learning and teachers during COVID impacted periods.<br>98% year 12 students completed their SACE.   |
|  | Improved outcomes for students with an additional language or dialect  | Teacher employed to support students with an additional language or dialect.<br>International students accessed tutorial support for their English language learning.   | Literacy levelling data gathered and used to effectively support students.  |
|  | Inclusive Education Support Program  | Leadership position created to ensure students have NEP; Learning Plans & One Plans which are implemented, monitored and reviewed.<br>Ensured staff understanding and monitoring special provisions.<br>Special tutors employed to support students with special provisions.<br>SSO ensures all documentation meets legislative requirements.<br>Alternative entry pathways to university further strengthened and increase numbers of students accessing. Ie Assessment Centre & PATE. | Students remained engaged in their learning within the mainstream, alternate programs implemented when necessary.<br>NDIS all completed their SACE and were accepted into a university pathway.           |
| Targeted funding for groups of students  | Improved outcomes for <ul style="list-style-type: none"> <li>rural and isolated students</li> <li>Aboriginal students</li> <li>numeracy and literacy including early years support</li> </ul> First language maintenance and development<br>Students taking alternative pathways<br>IESP support | Programs and alternative pathways including tutoring and one-on-one support.<br><br>Aboriginal students met regularly with teacher to check in and receive support and guidance in their learning and for their post-school pathways.<br><br>Students living in rural community supported to have internet access during COVID.<br><br>IESP all had learning plans in place which were monitored and adjusted as required to ensure successful outcomes.                                | All of our year 12 Aboriginal learners supported to successfully apply for university course.<br>All of our aboriginal learners were successful their learning.   |
| Program funding for all students         | Australian Curriculum  | Learning design addressed AC requirements, reporting student achievement against the achievement standards. Opportunities for students to collect evidence of their development of the General Capabilities continued.<br><br>PFD used to support teachers to design learning and moderate assessment of Australian curriculum.   | All yr 10 programs aligned with AC and every yr 10 students assessed against the achievement standards.<br>40 students used this evidence to apply for tertiary pathway into Flinders University courses. |
| Other discretionary funding              | Aboriginal languages programs initiatives  | NA  |   |

|  |   |   |   |
|--|---|---|---|
|  | Better schools funding                    | Funding used to provide IT equipment to students in need. Learning Studies program ensures student's are supported to self-direct, regulate and determine their learning. Leadership of a range of special programs focused on improved engagement and outcomes for students such as Challenge Based Learning week, STEMtacular, Primary Maths Extension Group and field camps. | Students engaged and supported as a result of increased teacher capacity to support and design appropriate learning programs. |
|  | Specialist school reporting (as required) | NA  |   |
|  | Improved outcomes for gifted students     | NA  |   |