

Penrith High School Annual Report





8163

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 Penrith High School 8163 (2017)
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Introduction

The Annual Report for **2017** is provided to the community of **Penrith Selective High School** as an account of the school's operations and achievements throughout the year.

It provides a detailed account of the progress the school has made to provide high quality educational opportunities for all students, as set out in the school plan. It outlines the findings from self–assessment that reflect the impact of key school strategies for improved learning and the benefit to all students from the expenditure of resources, including equity funding.

Mark Long

Principal

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Message from the Principal

It is with great pleasure that I write the Principal's report for the 2017 Annual Report. This publication captures the 2017 academic year and it has been impressive using so many measures.

2017 was been a year of adjustments, deep thinking and rigorous planning to ensure that we balance the day to day work of enabling every student to achieve their potential, whilst also planning for how we will continue to shape and position ourselves as a leading high school in the coming 5–10years.

We welcomed two new Deputy Principals, Mrs Tracey Cunningham and Mr Brian Ferguson. Mrs Cunningham joined our school as an experienced Deputy Principal in Queensland who most recently had been leading a number of curriculum projects with NESA (Formerly the NSW Board of Studies). Mr Ferguson was the long serving Head Teacher Mathematics and has added a huge depth to the work across the school.

We continued to maintain a very high level of academic performance with the Class of 2017. The HSC results were our best ever with the cohort achieving more Band 6 and E4 results than ever before. Our median ATAR of 91.95 was also the highest and the rank moved from 32nd to 27th which equalled the strongest performance shared with the class of 2010. All 156 students were offered placement in universities and 150 students received offers of university places before their HSC exams. These results are testament to the hard work by students, teachers and parents. Congratulations to everyone.

Student voice has continued to play a significant role in the life of the school. We have strategically looked to give multiple platforms for students to inform decisions and the reintroduction of the prefect body, the first since 1983 has been a wonderful addition. Their work alongside the SRC and House Captains has been impressive and will continue to be so. The prefects hosted their first Prefect Afternoon Tea and invited prefects and captains from the selective, partially selective and local Penrith schools. The afternoon attracted almost 120 student leaders and has seen the Penrith prefects invited to many prefect events across the selective schools network.

At a high performing selective high school like Penrith, it is challenging to capture all of the achievements of students when everyday there are students across years 7–12 doing extraordinary things. The focused work around student leadership has yielded so many unique opportunities and not a week has gone by that Penrith students aren't making an impact on global stages such as the Kokoda Trail or exchanges or closer to home at Government House or at Parliament. Sport, the Arts and Social Justice ensure that students at Penrith are supported to be not only outstanding academically but also experienced in so many facets for their future lives and careers.

Our parents continue to be incredibly supportive, adaptable and unwavering in making Penrith a school that understands and respects our traditions whilst demonstrating adaptability to ensure students are prepared for a slightly uncertain, but definitely globalised world. In 2017, we have looked to strengthen our engagement with our Alumni. As our school edges towards its 70th anniversary, we are so lucky to have leaders in almost every field. It has been enriching to welcome over 30 members of the Alumni back for a range of events this year and we look forward to doing this even more in 2018.

Finally, I want to conclude by acknowledging the passing of Mr Jack Mullane, former Principal of Penrith from 1976–1980. A pioneer and committed educator who was a member of the Mathematics teaching staff when the school opened in 1950. The 2017/18 Captains, Adam Evans and Grace Faulder joined our School Administration Manager, Maria Ryan, and I at his funeral in October this year.

Thank	you for	your ongoing	support of this	great	public scl	nool.
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Mark Long

Principal

Message from the school community

2017 was a significant year for Penrith Selective High School. Mr Mark Long embarked on a journey to make improvements in teaching & learning, administration, communication, assessments and student well-being. His considerable experience in successful selective schools enabled him to take the school forward in a very positive direction. Given the scale of the changes, I am glad to say that the response of every parent I have spoken to has been nothing short of enthusiasm. Apart from our regular general meetings, the P&C were involved in the following activities and school support in 2017:

Parent forums

We ran parent forums on:

- Term 1: Presentation on student stress and wellbeing, ATAR calculation
- Term 2: Pathway to medicine by 4 medical students graduated from PSHS
- Term 3: Pathway to Engineering by 6 engineering students graduated from PSHS

Scholarships

P&C gave 3 scholarships each valued at \$500.00 to three students identified by the school at the end of year Award Ceremony.

Selection panels for teachers

P&C provided parent and multicultural representatives for a large number of panels (DP, HT Maths, English teacher positions x 3) as well as Parent Representatives for the Curriculum Committee, that oversaw the introduction of a new timetable model. It was a consistent approach so students and parents knew how to access extension courses in Years 11 and 12. The P&C also contributed to discussions about subjects that would be offered to students as electives in years 9, 10, 11 and 12.

Uniform

The P&C also established the Buy and Swap platform for uniforms as was the commitment when blazers were introduced. The clothing pool was also reorganised so that more families could access this resource. The operating procedures were written by P&C parents and this will now be operated by students as part of their Duke of Ed volunteer hours.

Selection panels for new student intake

Five parents formed a panel that determined the rank order for students offered places in years 8–11. This involved looking at the shortlisted applications rated by the teacher panels and ranking them against the entry criteria and then advising the Principal in what order places should be offered. The parent panel also looked at a selection of applications that had been rated by the staff panel to provide transparency to the process.

Canteen

P&C parents played a huge role with the canteen and supporting the work there. Both as volunteers and as the subcommittee. There are paid canteen staff members including one manager, two staff sharing cover Monday to Friday, and recruiting is underway for additional cover of 3 hours on each of four days per week (excluding Wednesdays).

School Support & Funding

Funds have been set aside for the quad refurbishment. The designs are being finalised by the Captains who are working with the student body. Completion is expected by term 2. Following parent requests at meetings, additional funds from P&C are going to be requested to complete the air conditioning of the final 6 rooms across the school.

The P&C has a sizeable sum on hand at the bank waiting to be spent on resources for the school (over \$90,000). The allocation of these funds should be a matter of priority for 2018. Finally, I would like to extend my deep thanks and appreciation to the many people who have given so much time supporting Penrith Selective High School and the P&C. First of all, a huge thank you goes to the P&C executives who have worked very hard all year. Without their efforts very little would have been achieved. Then to the many parents who have given so much time to selection panels and the canteen. And finally to Mr. Long and the wonderful staff at PSHS who so ably teach and support our children.

Praba Prabaharan (Maheswaran)

P&C President

Message from the students

Over the past year, Penrith Selective High School has undergone many changes that have allowed students to be engaged in a wide range of opportunities across the school. We, as the school captains, have been lucky enough to be at the forefront of these changes, transferring them down from the student executive to the school community.

In 2017, PSHS elected a prefect body for the first time since 1983. This gave 30 senior students the opportunity to serve the school and further develop their leadership skills. Following our induction in term 3, and by working closely with the SRC, we have been able to run numerous events within the school and local community, allowing us to fully connect with more students and community members.

The prefects were able to play a significant role in the Graduation Night of the class of 2017. Despite a number of prefects being away on a Duke of Edinburgh Expedition, our body was able to do a fantastic job in assisting teachers with the operation of the night. This was one of the first opportunities for our new body to come together and organise an event for the school, allowing us to form closer bonds as a group.

Our initial project run by the prefects was World Teacher's Day, allowing all students to express their appreciation for all the hard work the staff at PSHS do to support every student. The prefects had a wall of bags for each member of staff that students could slip notes into, and these were delivered to the teachers at a staff morning tea. It was just a small token of appreciation and a way to give back to the staff around the school, but it was amazing to see the impact that these messages had on our teachers. We are thankful every day for all the hard work the teachers do to make PSHS such a wonderful environment.

The next event was our inaugural Prefect Afternoon Tea, which brought together over 120 students in leadership positions from over 20 selective and local high schools. At this event, Ms Emma Husar, Hon. Member for Lindsay presented the keynote address, while we also welcomed the Director of Public Schools Penrith, Ms Deb Summerhayes. The event was a resounding success, and we received positive feedback from our guests at the conclusion of the night. Since this event in term 4, our prefects have been invited to and attended over ten Prefect Afternoon Teas at various other selective schools across the Sydney Region, with many more to come over the next two terms. These events have provided us with the opportunity to form important connections between schools which will benefit all students.

On the same evening, ten Year 12 students then made their way to the ABC Studios to be a part of the live audience for the Annual Q&A School's Special. This gave students the opportunity to meet politicians and ask questions relevant to us, especially regarding education and youth employment. It was a very informative night and we are all grateful that we had the chance to attend this event.

We hope that the school leaders in the years to come continue some of the traditions we have established, but also form new and different events that will allow their leadership to flourish in the school and local community. The opportunities we have been given to develop our leadership skills and work with a wonderful group of leaders has allowed us to reach our full potential and we look forward to seeing leadership at PSHS to continue to develop in the coming years.

Grace Faulder and Adam Evans

School Captains 2017/18

School background

School vision statement

The school has a strong commitment to academic and personal excellence in all spheres of school life. Our dedicated teachers maintain a relentless focus on quality teaching with an emphasis on strategies to address the needs of gifted and talented students. We strive to develop students who are innovative thinkers and confident, self–motivated learners who possess strong ethical values. The school has active links with universities and its community. Our students thrive in an atmosphere which provides for co–curricular learning experiences, sport, creative and performing arts, leadership roles and school community service. It is important that we offer extensive student leadership opportunities that contribute to a positive school ethos and a philosophy of social justice. The school values the positive contribution parents make in our success.

School context

Penrith Selective High School is an academically selective high school in outer western Sydney with an enrolment of 930 students. 79% of students are from non–English speaking backgrounds, including significant numbers from Asian backgrounds. Our Aboriginal students make up 0.5% of the student community and the school is committed to promoting its cultural and linguistic diversity.

The school's parent community holds high expectations of academic success for our students. 100% of students progress to tertiary education through university.

The school has large, well—manicured grounds. All learning spaces have access to technology and all classrooms have interactive whiteboards or data projectors.

Self-assessment and school achievement

Self-assessment using the School Excellence Framework

This section of the Annual Report outlines the findings from self–assessment using the School Excellence Framework, school achievements and the next steps to be pursued.

This year, our school undertook self–assessment using the School Excellence Framework. The framework supports public schools throughout NSW in the pursuit of excellence by providing a clear description of high quality practice across the three domains of Learning, Teaching and Leading.

During the self–assessment completed by the executive, the team considered our evidence and assessment of the school's progress, aligned with the standards articulated in the School Excellence Framework. The results of this process indicated that our learning culture was sustaining and growing as a result of strong collaboration with all stakeholders in the school. Evidence including student responses in the TTFM survey and the evaluation of our newly developed teaching programs that are differentiated to meet the needs of highly gifted learners support this assessment. We are deeply committed to further professional reflection, capacity building and professional learning to ensure that our gifted students and the school community understand their role and responsibility for their ongoing learning.

Our school has well–developed support structures in place to foster the cognitive, emotional, social, physical and spiritual wellbeing of students, which evidence shows has improved the individual and collective wellbeing of students. Our SEF self–assessment of wellbeing reflected that we were excelling in this element as individual learning is supported by quality teaching practices, goal setting processes and the implementation of the growth mindset model, developed by Carol Dweck. Our aim is to develop students who are self–aware, able to build positive relationships and actively contribute to the school as evidenced through TTFM data showing high student social engagement. At Penrith Selective High School we have developed an integrated approach to quality teaching, curriculum planning and delivery, and assessment.

We promote learning excellence and responsiveness in meeting the learning needs of all students. We have self–assessed through the SEF as excelling in regards to curriculum and learning as we have policies, programs and processes in place to identify and address student learning needs. Our evidence shows the development of an integrated approach to quality teaching, development of teaching and learning programs for gifted and talented students. Staff have reviewed existing programs, designed program proformas and checklists to use when redesigning their teaching and learning programs. Staff continue to share and refine teaching sequences and resources through regular professional learning to improve their skills in delivering differentiated programs.

Our gifted students have consistently achieved excellent results on external performance measures. In addition, strong value added results within most NAPLAN measures have been achieved. Our SEF self–assessment of student performance measures reflected that we are excelling in this element because of our strong HSC results, ongoing commitment to reflection on results and staff professional learning around improving data analysis knowledge and skills. Evidence includes SMART and RAP data and samples of data analysis processes used across the school to reflect on and analyse HSC, NAPLAN and VALID results. In addition, excerpts from professional learning sessions aimed at improving staff data analysis skills demonstrate an ongoing commitment to improvement of student results through continued training, reflection and review of teaching and learning programs.

PSHS has worked on developing consistent, school–wide practices for assessment and reporting across the curriculum. Our SEF self–assessment of assessment and reporting reflected that we were sustaining and growing in this element as a result of practices implemented in using SENTRAL to improve information accessibility for parents, students and teachers as well as staff training and engagement in data analysis. Evidence including the Parent and Student Portal, a sample school report and HSC analysis by teachers, demonstrate how current data is easily accessible and used to monitor, plan and report on student learning across the curriculum.

All teachers at PSHS are committed to identifying, understanding and implementing effective teaching methods for gifted learners. Our self—assessment on effective classroom practice was sustaining and growing. Evidence provided includes a sample of a differentiated program where explicit teaching and learning strategies have been embedded, to meet the needs of gifted and talented students; this program meets the school wide expectations for programs. Teachers will endeavour to evaluate their practices and continue to incorporate evidence—based teaching strategies into programs, or make adjustments where necessary, to support student learning.

All teachers are given the opportunity to collaborate and provide feedback to sustain quality teaching practice. Our self—assessment on collaborative practice is sustaining and growing. A sample faculty development plan/agenda, a sample of a teaching and learning program created between faculty members and faculty minutes highlighting processes and time allocated for staff to analyse RAP and NAPLAN data, are evidence of this. Teachers also collaborate with students to improve their practice. Evidence includes student evaluations which are used to monitor, review and refine teaching programs. The school will work towards establishing explicit systems for collaboration and feedback to sustain

teaching practice through the continued roll out of the PDP process for all staff.

Staff at PSHS have focused on developing skills in data analysis and strategies to use these skills as a tool to encourage curriculum innovation and quality teaching. Our SEF self–assessment on data skills and use reflected that we were sustaining and growing in this element as a result of expert staff leading the professional learning of others in data use to inform future directions. Evidence including faculty meeting minutes, professional learning materials, a school developed RAP analysis system which identifies student achievement and progress, as well as samples of adjusted programming support this assessment. Staff are engaged in the use of data in their planning for learning and identification of skill gaps for improvement.

At PSHS, staff have shown a commitment to working collaboratively towards school goals beyond their classrooms. Our SEF self–assessment on professional standards reflected that we were sustaining and growing in this element as a result of staff working collaboratively to develop innovative and well differentiated teaching and learning sequences. Evidence including snapshots of professional learning materials, student surveys and evidence of the completion of the mini–certificate of gifted education by all staff support this assessment. Staff are committed to maintaining and developing their professional practice and are using the Australian Professional Standards for Teachers to inform their development.

At PSHS, staff have engaged in professional development with a focus on improving their performance. Our SEF self–assessment of learning and development reflected that we were sustaining and growing in this element as a result of staff actively sharing professional learning and teaching experiences, while also engaging in professional dialogue to build on understanding of effective teaching strategies. Evidence including faculty meeting minutes highlighting professional dialogue surrounding NAPLAN results and a focus on improved teaching methods in literacy and numeracy, as well as a staff development day agenda which enabled teachers to work together within faculties support this assessment. Staff at PSHS, continue to find value in working collegially to support their professional learning and development.

Our Academically Selective High School leadership team actively supports a culture of high expectations and community engagement. Our SEF self—assessment of leadership reflected that we were sustaining and growing in this element as a result of establishing valuable partnerships in the wider school community. Evidence of this includes, the student learning and leadership programs established with UTS and UNSW. Also the staff leadership development program has been underpinned by a learning platform consisting of GERRIC training, the growth mindset model and data analysis skills to allow staff to teach, reflect and refine their day to day practice with the aim of improving educational opportunities for students. While we are reaching a level of sustaining and growing in leadership, this learning platform will continue to be a vital element in our ongoing school improvement efforts in implementing the schools vision, strategic directions and the professional effectiveness of our school.

Our school plan is at the core of continuous improvement efforts. The SEF self–assessment of school planning, implementation and reporting reflected that we were sustaining and growing in this element. Our school vision is to improve communication in our school community. The school plan is informed by current educational research that demonstrates the strong link between high levels of student performance and the inclusion of all stakeholder groups including students, staff and parents to maximise student achievement. Our school's strategic directions are centred on building capacity with each group (Students, Staff and Community) and these are evident across the three strategic directions and the milestones within the school plan. Our school resources are strategically used to drive each of the three strategic directions of our school plan. We assessed our performance of as excelling in this area. This assessment is supported by the implementation of Sentral to align all systems and processes on one platform. This has delivered a streamlined process for staff, students and parents to engage with while also allowing the executive team to examine data and trends to ensure that decisions are evidenced based and student focused.

In the element of management practices and processes, we self–assessed as sustaining and growing. Through deep professional discussions and reflection against the framework within the executive team and the broader school staff, we have started on a process of closely examining our management systems, structures and processes and have a commitment from staff to research current best practice and to redesign how our day to day and long term effectiveness reflects the high expectations of our school community and our shared vision of a high performance setting that meets the needs of every gifted learner in the school.

Our self–assessment process will assist the school to refine our school plan, leading to further improvements in the delivery of education to our students.

For more information about the School Excellence Framework:

https://education.nsw.gov.au/teaching-and-learning/school-excellence-and-accountability/sef-evidence-guide

Strategic Direction 1

Students will be engaged, curious learners who think critically and creatively to make a difference in their world

Purpose

To deliver a quality learning environment for gifted and talented students that inspires them to think deeply, logically and divergently in order to add value to their academic and social performance.

Students will be supported to become skillful, resilient, empathetic, resourceful and passionate lifelong learners who can embrace and lead change.

Overall summary of progress

Significant progress has been made in ensuring all Faculty programs are based on the Quality Teaching Framework and focus on significant learning experiences that develop higher order thinking skills for gifted and talented students. Teaching and learning programs across all courses 7 – 12 were reviewed to identify where further adjustments need to be made to engage gifted and talented students in higher order learning activities.

All teaching staff continued their professional learning with Gateways Education, which focused on strengthening our teaching and learning programs within a conceptual framework and differentiated teaching and learning activities for gifted and talented students. It promotes the intellectual quality PSHS students; it engages students in higher—order thinking and facilitates the development of problematic knowledge. Through this, students are supported in making meaningful connections and it facilitates the creation of rich and deep understandings of the world around us.

There has been a continued focus on structured curricular and extra—curricular programs that foster leadership opportunities through challenging differentiated and multifaceted experiences. Students have been provided with learning opportunities to enable them to think critically and creatively to make a difference in their world through participation in programs such as:

- School programs High Resolves, UTS Enterprise Challenge, Entrepreneurial Learning Project, Debating and Public Speaking, Model United Nations Assembly (MUNA) just to name a few;
- Student Social Clubs Politics Club, Social Justice Club, MUNA Club, Chess Club, Coding Club, Photography Club and more will be established as student demands change; and
- Restructuring of the Student Leadership Group: the re–introduction of the PSHS Prefect Body, a new electoral process for student leadership positions and a re–imagining of the responsibilities of the SRC.

It is these programs that enable students to develop leadership characteristics and abilities through dynamic and engaging practical experiences in and out of the classroom.

PSHS is encouraging student self–direction and determining systems to show measureable improvement. For example, students of Year 10 now develop a post–school destination plan in consultation with key stakeholders; this ensures students have a clear direction and an understanding of what the student needs to undertake at PSHS to achieve their goals. In addition, PSHS developed the Academic Advisory Team (AAT) made up of key staff to monitor and support the progress and welfare of students in need of more attention. This important initiative ensures that all students, irrespective of their circumstances, can achieve their goals at PSHS.

Progress towards achieving improvement measures				
Improvement measures (to be achieved over 3 years)	Funds Expended (Resources)	Progress achieved this year		
100% of subjects have Teaching and Learning programs based on the Quality Teaching Framework that effectively deliver an appropriate curriculum for gifted and talented students.	\$70,000	Faculties have continued to focus on improving their teaching and learning programs with a clear emphasis on embedding the conceptual framework. Staff have engaged in further professional learning focused on developing their teaching and learning programs within a conceptual framework to improve the intellectual rigour for students. This professional learning is also focused on the development of differentiated learning activities targeted specifically at gifted and talented learners.		
90% of students are actively engaged in their learning as	Nil	The Tell Them From Me student surveys completed in 2017 indicate areas of strengths but also		

Progress towards achieving improvement measures				
Improvement measures (to be achieved over 3 years)	Funds Expended (Resources)	Progress achieved this year		
measured by the Tell Them From Me survey and Quality Teaching Student Evaluation forms.		highlight areas for further improvement in relation to student engagement with our teaching and learning programs. Data indicated high levels of institutional engagement with clear improvements in student's homework and study habits. In regards to intellectual engagement students have indicated increased levels of effort being applied there is still, however, the need to focus on providing students with greater challenges and rigours in their learning experiences.		
90% of students set, monitor, review and reflect on their learning goals throughout the year.	\$2,000	The Post–Schools Destinations Plan that was implemented across 2017 saw an increased focus on the importance of all students setting specific learning goals and developing a common language and understanding around the importance and values of learning goals and linking it to future post–school directions.		

Next Steps

Teaching and Learning that meets the needs of every student at PSHS is essential. In 2018, as PSHS moves into the new School Plan cycle, student learning will continue to be a central strategic direction.

PSHS will focus on the continued development of differentiated programs underpinned by conceptual frameworks to drive learning in every classroom. Faculties will continue to work closely with Gateways Education to deliver highly engaging teaching and learning programs that are differentiated for gifted and talented students.

A significant change for 2018 will be the new period structure that has been designed to maximise student learning. In 2018, PSHS will move from a four period day to a six period day. The aim is to restructure the teaching and learning to increase teaching and learning in the classroom.

PSHS will be introducing a new Business Studies accelerated course. Selected students with a particular gift for Business Studies will be undertaking the Preliminary and HSC course a year early. This gives these student an enormous opportunity to excel in this particular course and give them more option in their final year of study. As the school moves forward, PSHS will be looking to increase the opportunities to deliver accelerated options.

In 2018 and beyond we will evaluate the programs and activities that are offered at PSHS to ensure they are meeting the needs of our gifted and talented learners. We will continue to offer a structured Mathematics enrichment program as well as expanding our debating program to enable greater participation of students in these two highly sought after areas.

The new student leadership framework will be solidified to strengthen the role of our student leadership team, provide more opportunities and promote greater equity across the school. We will also survey the student body to determine the areas they would like further opportunities to engage with to determine future directions.

In 2018 PSHS will also continue to focus on students setting and reviewing their learning goals independently as well as encouraging students to achieve their personal best through a shared and common language, supported by both the Wellbeing team and the AAT.



Strategic Direction 2

Staff will lead learning through collaboration and innovative practice

Purpose

To create a community of teachers who are dynamic facilitators of challenging learning experiences for gifted and talented students.

Teachers are engaged in targeted, explicit curriculum innovation and quality teaching that inspires learning and increases student engagement.

To ensure continued alignment and development of outstanding teaching practice and leadership capabilities in line with the Australian Standards for Teachers and Standards for Principals.

Overall summary of progress

There have been four significant areas where data has been incorporated into decisions that have specifically supported the instructional leadership of the school at the whole school, faculty, Stage and classroom levels.

Aided through a whole school focus on HSC data and the use of RAP and SMART data, all teachers, led by Faculty Head Teachers have engaged in analysing and evaluating practice in relation to student performance data. In early Term 1, 2017 the whole staff were engaged in professional learning facilitated by NESA Senior Education Officer for Assessment and Reporting who was able to highlight the significant aspects of HSC data and the RAP analysis as it pertained specifically to our school. Drawing on past performance and current Year 12 data, teachers were able to reflect on school–based assessment practices and make informed decisions about teaching and learning priorities. This set the stage for increased awareness of academic standards, student learning and progress which has helped shape teaching practice and school direction.

With every teacher having professional development plans (PDP) and engaging in reflective practises linked to the Australian Teaching Standards (APST), teachers worked on goals for improvement. The PDP process was linked to RAP analysis, and evidence–based improvement measures that related to both school priorities and personal development goals.

The Wellbeing Team collaborated in professional learning and inquiry, drawing on the Tell Them From Me Data, and attendance data, and using research focused on models for gifted and talented education including Gagne's model for Differentiated Learning and the Del Siegle and McCoach model for Achievement Orientation to focus on the school factors that support increased motivation and engagement. Through this action research, the Wellbeing Team was able to articulate wellbeing principles that served the Penrith context, clarify four wellbeing priorities of Responsibility, Belonging, Resilience and Purpose. This formed the basis of the new Wellbeing Strategy that addressed student learning and development across personal, social and academic domains and brought under its umbrella increased student voice, structured co–curricular and enrichment initiatives, a robust House System and a reward and recognition program that incorporated school values of diligence, initiative, citizenship, courage and integrity.

With the establishment of the Academic Advisory Team beginning in 2017, student achievement data including NAPLAN and research around Gifted Learners became a fundamental priority. Student achievement data was collated to create tables that tracked student performance, enabled effective triangulation of data and highlighted issues of underperformance in a gifted context. Data was reviewed in subject, stage and year groups with student progress and wellbeing at the centre of our professional learning and inquiry. A key driver of internal, collaborative processes, the data provided every faculty with the impetus for improved cycles of diagnosis, monitoring and feedback. Work orientated around individual students and classroom practice leading to improved knowledge and understanding of student learning and engagement needs.

Every teacher participated in structured professional learning centred around gifted and talented education focused on professional practice around curriculum design, quality pedagogy and authentic assessment. With an emphasis on collaborative planning and assessment practices, teachers worked in Faculty teams with an expert consultant to create innovative, differentiated, conceptual programs reflecting best practice in teaching and learning. Meetings occurred with scheduled regularity to support teachers in the evaluative process that enabled meaningful changes to practice and classroom teaching and learning experiences, leading to strong and distributed instructional leadership.

Curriculum Head Teachers were immersed in professional development where they undertook Action –Research Projects focused on instructional leadership, and gifted and talented education. Faculty meetings were underpinned by a professional learning agenda that saw faculty collaboration and engagement with feedback, data, teaching and

learning impact increase each Term leading to a culture of sharing and reflection building the capabilities and experiences of all staff. Teacher collaboration was further facilitated by four Alternative Staff Development Days that created time for collaborative marking events, HSC marking simulations and curriculum centred professional development.

Through the implementation of Curriculum folders, 100% of teachers have developed a shared language for teaching and learning design and curriculum leadership at the faculty, cross faculty and classroom level. The curriculum folders have created an emphasis on forward planning, supported by Scope and Sequence documents and quality assessment tasks that value skills development, rigorous standards, managing student progress and aligned teaching and learning strategies. As a result of this whole school curriculum practice cross–faculty discussions have emerged around problem–based learning, improved STEM opportunities, team teaching and teacher observation protocols, creating opportunity for contextually relevant curriculum, teaching and learning innovation into the future.

The Curriculum and Technology Committees included student and parent representatives enabling a stronger focus on the teaching and learning conditions reflecting the voice of all key stakeholders. In true collaboration, teachers, students, parents and the executive team worked together to problem solve questions of:

- · curriculum in relation to timetabling, acceleration, and access to learning for gifted students
- technology in relation to learning management systems, classroom technology tools and interfaces, BYOD policies and enrichment

As a result of these committees, the school has advanced many outcomes including timetable changes, the structured lessons for Wellbeing and House based activities, a whole school technology action—plan, streamlined acceleration practices and the emergence of new accelerated options for students. The committees have represented school—community partnerships and reflect a strong unified culture of evaluation, critical and creative enterprise.

Teachers are actively engaged in accreditation processes, with 100% of teachers having been engaged in professional development about the APST and maintaining your professional accreditation. Regular in–service meetings occurred across the year to support teachers in the transition to a full accreditation environment. School–based professional learning was organised to align with the APST, with Standard Descriptors clearly and appropriately nominated for specific professional development activities. The school made gains in understanding the process registering professional development activities with NESA to meet the professional learning requirements for a minimum of 50 hours of Registered Professional Learning. To date 10 staff members have successfully applied for higher accreditation through a Departmental Scholarship Initiative and four key members of staff have been selected as mentors for Highly Accomplished and Lead aspirants.

Progress towards achieving improvement measures				
Improvement measures (to be achieved over 3 years)	Funds Expended (Resources)	Progress achieved this year		
90% of teachers can demonstrate how they use data and research to improve their teaching practice. 100% of teachers understand the process for achieving higher levels of teacher accreditation linked to the Australian Teaching Standards and increased numbers of staff are seeking this accreditation.	Not applicable	Data has been incorporated into decisions that have specifically supported the instructional leadership of the school: • all teachers have engaged in analysing and evaluating practice in relation to student performance data. • all teachers are working on goals through the PDP process • the Wellbeing Team collaborated in professional learning and inquiry, drawing on the Tell Them From Me Data, and attendance data, and using research focused on models for gifted and talented education • student achievement data including NAPLAN and research around Gifted Learners became a fundamental priority		
80% of teachers have collaborated with colleagues and/or students and/or parents in designing, implementing and evaluating innovative teaching and learning sequences.	\$5,500	Every teacher participated in structured professional learning centred around gifted and talented education focused on professional practice around curriculum design, quality pedagogy and authentic assessment. Through the implementation of Curriculum folders, 100% of teachers have developed a shared language for teaching and learning design and curriculum leadership at the faculty, cross faculty and classroom level.		
100% of teachers understand the	Not applicable	Teachers are actively engaged in accreditation		

Progress towards achieving improvement measures				
Improvement measures (to be achieved over 3 years)	Funds Expended (Resources)	Progress achieved this year		
process for achieving higher levels of teacher accreditation linked to the Australian Teaching Standards and increased numbers of staff are seeking this accreditation.		processes, with 100% of teachers having been engaged in professional development about the APST and maintaining your professional accreditation. Regular in–service meetings occurred across the year to support teachers in the transition to a full accreditation environment.		

Next Steps

In 2018 the continued development of teacher skill in differentiated programming will be a central strategic direction in the new 2018–2020 School Plan. Teachers will continue to be enhanced by collaborative practices within faculties and across the school. A culture of collaboration in sharing classroom practice will allow teachers to further refine strategies. Data analysis linked to pre–testing and other forms of assessment for learning will inform programming practice and facilitate greater levels of differentiation within classrooms. Additional resources will be required to allow teachers time to undergo further professional learning and to receive appropriate guidance in how to differentiate programs and how to pretest and be able to measure learning gain.



Strategic Direction 3

A connected school community that contributes positively to support student learning

Purpose

To create, enhance and maintain partnerships which are founded on meaningful participation in school programs, with a focus on the transition of students to tertiary learning.

To enhance the quality, sustainability and equity of community partnerships to increase the breadth and depth of student learning experiences.

To improve communication in our school community to facilitate quality educational experiences for our students and their families.

Overall summary of progress

The school has devised a number of integrated strategies to ensure consistent and relevant communication with the parent community.

The School Newsletters are published on alternate weeks to the year newsletters, which have ensured a consistent flow of information. The year advisers and year deputies have an opportunity to connect with parents and alert parents to issues directly related to the year group.

The school website and Facebook site have increased traffic this year, and provide important updates for upcoming activities as well as enabling parents to make payments online.

There has been a greater commitment to accessing and connecting with the School's Alumni. The Alumni have been invited to the school to inspire our students through tutoring maths enrichment and debating classes. They spoke about their experience of leadership at the Prefect induction and SRC induction ceremonies. They have also been invaluable in addressing the P&C members and students who desire to do Medicine as previous students who are currently studying medicine addressed the school community in the 'Pathways to Medicine' Night.

Involving the Parents in career pathways for our students has been a critical move in ensuring our students make informed decisions with subject selections. Parents of Year 10, 11 and 12 were invited to be involved in an evening at the school to help their child develop their Post School Destination Plan. This is seen as a critical enhancement to the process of subject selections for Year 10 and university course selections for Year 11 and 12.

Our Prefects have had an enormous year paving the way for future years as our first Prefect body. They have made strong links with other Prefect bodies in other selective high schools and hosted the Prefect Afternoon Tea involving over 120 people including Emma Husar our Federal MP for Lindsay.

Students continue to be recognised for their extra curricula activities through the school merit and reporting system. Our students link to external volunteering and leadership initiatives like Max Potential, Rotary Youth Award, Lions Clubs Youth of the Year and Partnerships with the Penrith Primary School with year 9 peer tutoring student in maths enrichment. Our Duke of Edinburgh program also has enabled many of our students to connect with the broader community in a meaningful way.

Students continue to experience university partnerships that provide tertiary education experiences whilst at school. All of our senior students attended a meaningful university experience that meets the needs of our gifted students.

Progress towards achieving improvement measures				
Improvement measures (to be achieved over 3 years)	Funds Expended (Resources)	Progress achieved this year		
100% of students have their volunteering experiences recorded and then recognised through the school merit system, school report and BOSTES accreditation. Students, parents and staff indicate improved school communication and	Not Applicable	A database has been established for volunteering through the use of the Sentral system. An evaluation of the school merit system has allowed reward and recognition through the merit and reporting system to promote and recognise an enhanced culture of school service and leadership.		

Progress towards achieving improvement measures				
Improvement measures (to be achieved over 3 years)	Funds Expended (Resources)	Progress achieved this year		
publicity tools, measured by their participation in annual school based surveys and communication tool use.		A database has been established for volunteering through the use of the Sentral system. An evaluation of the school merit system has allowed reward and recognition through the merit and reporting system to promote and recognise an enhanced culture of school service and leadership.		
100% of Year 10, 11 and 12 students have attended an enhanced school based university experience.	\$3,000	Year 10 participated in the University of Sydney – Extended Campus Tour, MQ Discovery Day, UNSW and USYD Subject Selection, Max Potential and industry only work experience. Year 11 participated in the WSU 'U' Day and the Macquarie University Extended Campus Tour, Footpath to Finance workshop, UBS Finance week and UBS women in Finance week, UTS Mock Trial.		
		Year 12 had a number of Lunchtime Seminars from the University of Sydney, UTS, Macquarie University, UNSW, Defence Force Recruiting, USYD Scholarships, UNSW Coop, Chartered Accountants Aus/NZ, Champion Accounting firm, Actuarial Institute, Med Entry and WSU.		
Students, parents and staff indicate improved school communication and publicity tools, measured by their participation in annual school based surveys and communication tool use.	Not applicable	There has been progress in the effective use of the school calendar for communication of upcoming events and an increased use of Sentral for explaining student absences. This year we introduced Parent/Teacher bookings online and the posting of school reports on the Parent/Student Portal. The Website and Facebook sites are being utilized more effectively and communication via newsletters are more targeted to particular year groups.		

Next Steps

The three main dimensions of the 2018 - 2020 school plan will differ. However, whilst 'community' will not be a separate dimension, it holds a key role in the progression of and richness of the 3 areas of Leadership, Teaching and Learning and as such will be incorporated into each of these.



Key Initiatives	Resources (annual)	Impact achieved this year
Aboriginal background loading	\$2,547	In 2017, the school celebrated NAIDOC day with a special celebration that included recent alumni, Taylor Clark returning as guest speaker. Additionally, our Aboriginal students were supported through the development of personalised learning plans that were developed in consultation with parents and students.
English language proficiency	Nil	In 2017 the loading was used to assist the work of the newly formed Academic Advisory Team who provided additional individualised support to the students who were identified as EAL/D at Penrith Selective High School.
Low level adjustment for disability	\$71,860	Low level adjustment for disability is an allocation to support students in regular classes who have additional learning and support needs. In 2017 there were a number of students requiring personalised learning support. With this funding PSHS was able to create the Academic Advisory Team (AAT) whose role is to identify, monitor and support students requiring individualised support.
Socio-economic background	\$13,357	Students from low SES backgrounds were supported to ensure that they had full access to all programs within the school, including the broad co–curricular program.
Support for beginning teachers	\$40,350	In 2017, beginning teachers were provided with funding by the DoE to support their ongoing development. These teachers worked with their faculty supervisor to plan the most appropriate use for the funding provided. Funding was used to provide time to complete a range of tasks including programing, marking and compliance related to attaining Proficient status under the Australian Professional Teacher Standards.



Student information

Student enrolment profile

	Enrolments			
Students	2014	2015	2016	2017
Boys	521	527	532	530
Girls	410	411	418	394

Student attendance profile

School					
Year	2014	2015	2016	2017	
7	97.9	95.8	96.8	96.4	
8	96.5	96.1	95.8	96.4	
9	95.4	95.8	95.2	94.6	
10	95	94.6	95.5	94.7	
11	95.5	96	95.2	95.7	
12	94.4	95.6	95.9	94.7	
All Years	95.8	95.7	95.7	95.4	
		State DoE			
Year	2014	2015	2016	2017	
7	93.3	92.7	92.8	92.7	
8	91.1	90.6	90.5	90.5	
9	89.7	89.3	89.1	89.1	
10	88.1	87.7	87.6	87.3	
11	88.8	88.2	88.2	88.2	
12	90.3	89.9	90.1	90.1	
All Years	90.2	89.7	89.7	89.6	

Post-school destinations

Proportion of students moving into post-school education, training or employment	Year 10%	Year 11%	Year 12%
Seeking Employment	0	0	0
Employment	0	0	0
TAFE entry	0	1	0
University Entry	0	0.5	100
Other	0	0	0
Unknown	0	0	1

The 2017 cohort of HSC students achieved great success and it has lead to some exciting post–school destinations. Offers made by faculty school through the University Admissions Centre (including combined degree offers) are listed below:

- Medicine 2
- Dentistry Optometry 1
- Business / Commerce 78
- Engineering 42
- Law 28
- Science 28
- IT 17
- Applied Science (speech pathology, occupational therapy, exercise physiology, oral health) 15
- Physiotherapy 7
- Psychology 13
- Actuarial 9
- Medical Science 23
- Accounting and Finance 21
- Education 5
- Built Environment 13
- Nursing 4
- Aviation 1
- Media, Communication and Design 10

With the vast majority of students entering a university, the total offers made by Tertiary Institutions are listed below:

- University of NSW 44 (in addition to 83 Early Guaranteed offers)
- University of Sydney 49
- Macquarie University 82
- University of Technology Sydney 37
- Western Sydney University 20
- University of Newcastle 1
- Charles Sturt University 2
- Australian Catholic University 5
- University of Wollongong 3
- Australian National University 3

Year 12 students undertaking vocational or trade training

Not applicable as all 2017 HSC students have taken different tertiary education pathways.

Year 12 students attaining HSC or equivalent vocational education qualification

All 160 students of 2017 cohort were awarded a Higher School Certificate.

Workforce information

Workforce composition

Position	FTE*
Principal	1
Deputy Principal(s)	2
Assistant Principal(s)	0
Head Teacher(s)	10
Classroom Teacher(s)	46.1
Teacher of Reading Recovery	0
Learning & Support Teacher(s)	0.4
Teacher Librarian	1
Teacher of ESL	0
School Counsellor	1
School Administration & Support Staff	11.37
Other Positions	1

^{*}Full Time Equivalent

Teacher qualifications

All teaching staff meet the professional requirements for teaching in NSW public schools.

Teacher qualifications

Qualifications	% of staff	
Undergraduate degree or diploma	67	
Postgraduate degree	33	

Professional learning and teacher accreditation

Professional Learning

PSHS actively encourages the professional development of all staff in order to support our differentiated and engaging curriculum and/or to support staff in achieving their personal goals and/or KLA specific learning demands. Professional Learning not only enables teachers to build the professional capacity of the school but to support our student using best practice. Some of the PL in 2017 included:

- Staff Choice Workshops

 Variety of topics
 delivered by the Executive for staff to register into
 their preferred area of interest.
- Ongoing faculty based conceptual framework PL by GATEWAYS education
- HSC Data Analysis Jo McFarland from NESA demonstrated strategies of how to use RAP data to inform our teaching and learning and planning.
- HSC Marking Each faculty reached out to experienced HSC Markers/Judge to build networks within their KLA and support in collegial marking practices.

Accreditation

In 2017, workshops were available for all staff and catered to all levels of accreditation. These workshops were delivered by the HT Teaching and Learning and established to support casuals, temporary and permanent staff members throughout their accreditation journey. Workshops included:

- Accreditation requirements (proficient, HA and Lead)
- · Useful tools, resources and websites
- · Unpacking the standards
- The types of Evidence per standard
- Research based evidence
- Scaffolding the annotation process
- Annotating Evidence practice
- Logging PD hours
- · Reflecting on sample reports
- Seeking registered hours
- Research based Evidence
- · Sharing ideas

These workshops have enabled beginning teachers to compile their reports in order to achieve proficiency, helped teachers when writing their maintenance reports, and assisted staff seeking Highly Accomplished/Lead level of accreditation.

Teachers seeking HA/Lead were also given the opportunity to run sessions within these workshops in order to share the leadership role and aid in achieving specific standards. In preparation for 2018, these colleagues could play a vital role in supporting their faculty areas.

Financial information (for schools using both OASIS and SAP/SALM)

Financial information

The three financial summary tables cover 13 months (from 1 December 2016 to 31 December 2017).

The financial summary consists of school income broken down by funding source and is derived from the school Annual Financial Statement.

The school continues to benefit from high levels of parent support through the payment of fees. This allows the school to offer a broad and rich learning program for all students.

In 2017, the school migrated across to the Department's LMBR system which resulted in a cautious year of expenditure. Strategic planning has been considered in the school plan to invest in upgrades to playground areas, technology in classrooms and an extensive professional learning program for all teaching staff that focuses on leadership and classroom delivery for highly gifted students in a

Receipts	\$			
Balance brought forward	1,602,474			
Global funds	406,998			
Tied funds	120,289			
School & community sources	637,136			
Interest	21,940			
Trust receipts	5,593			
Canteen	0			
Total Receipts	1,191,957			
Payments				
Teaching & learning				
Key Learning Areas	104,952			
Excursions	183,309			
Extracurricular dissections	117,704			
Library	14,804			
Training & Development	0			
Tied Funds Payments	217,407			
Short Term Relief	82,015			
Administration & Office	258,328			
Canteen Payments	0			
Utilities	86,621			
Maintenance	66,382			
Trust Payments	16,929			
Capital Programs	19,687			
Total Payments	1,168,137			
Balance carried forward	1,626,294			

Figures presented in this report may be subject to rounding so may not reconcile exactly with the bottom line totals, which are calculated without any rounding.

The information provided in the financial summary includes reporting from 1 January 2017 to 31 December 2017.

	2017 Actual (\$)
Opening Balance	0
Revenue	2,461,068
Appropriation	2,052,506
Sale of Goods and Services	50,306
Grants and Contributions	354,372
Gain and Loss	0
Other Revenue	0
Investment Income	3,884
Expenses	-659,403
Recurrent Expenses	-659,403
Employee Related	-175,076
Operating Expenses	-484,327
Capital Expenses	0
Employee Related	0
Operating Expenses	0
SURPLUS / DEFICIT FOR THE YEAR	1,801,664
Balance Carried Forward	1,801,664

The Opening balance for the 2017 school financial year is displayed in the OASIS table as Balance brought forward. The financial summary table for the year ended 31 December 2017 shows the Opening balance as \$0.00 because the Opening balance for the 2017 school financial year is reported in the OASIS table (as Balance brought forward).

The amount displayed in the Appropriation category of the financial summary table is drawn from the Balance carried forward shown in the OASIS table and includes any financial transactions in SAP the school has undertaken since migration from OASIS to SAP/SALM. For this reason the amount shown for Appropriation will not equal the OASIS Balance carried forward amount.

The school finance team meets regularly and with the full roll out of LMBR processes across the school, additional members will be added to this team.

There was significant expenditure in the area of professional learning to support staff re design curriculum for our students. The majority of this money came from school and community resources.

Financial summary equity funding

The equity funding data is the main component of the 'Appropriation' section of the financial summary above.

	2017 Actual (\$)		
Base Total	8,136,908		
Base Per Capita	145,124		
Base Location	0		
Other Base	7,991,784		
Equity Total	87,764		
Equity Aboriginal	2,547		
Equity Socio economic	13,357		
Equity Language	0		
Equity Disability	71,860		
Targeted Total	0		
Other Total	107,520		
Grand Total	8,332,193		

Figures presented in this report may be subject to rounding so may not reconcile exactly with the bottom line totals, which are calculated without any rounding.

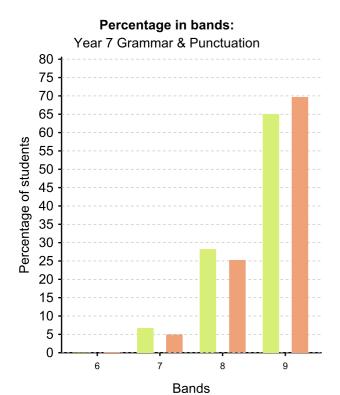
A full copy of the school's financial statement is tabled at the annual general meetings of the parent and/or community groups. Further details concerning the statement can be obtained by contacting the school.

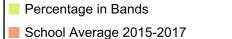
School performance

NAPLAN

In the National Assessment Program, the results across the Years 3, 5, 7 and 9 literacy and numeracy assessments are reported on a scale from Band 1 to Band 10. The achievement scale represents increasing levels of skills and understandings demonstrated in these assessments.

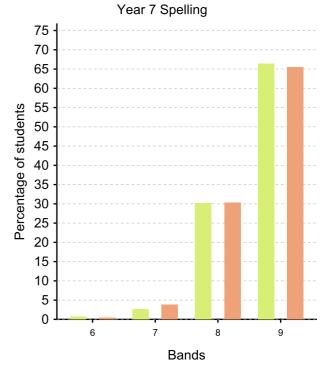
PSHS produces excellent results in Literacy. Spelling and Grammar & Punctuation are particular strengths of our students with Year 7 achieving 93% and 97% at proficiency respectively. Similarly, 93% and 75% of Year 9 students achieved proficiency in Spelling and Grammar & Punctuation respectively. No student at Penrith Selective High School received a result below Band 6 in Reading, Spelling and Grammar & Punctuation.





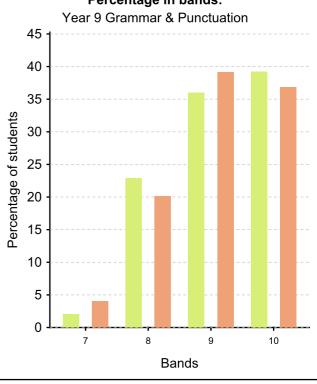
Percentage in bands: Year 7 Reading 55 50 45 Percentage of students 40 35 30 25 20 15 10 5 0 8 6 7 9 Bands Percentage in Bands

Percentage in bands:



Percentage in Bands
School Average 2015-2017

Percentage in bands:



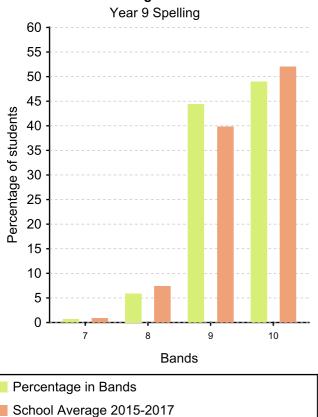
■ Percentage in Bands■ School Average 2015-2017

School Average 2015-2017

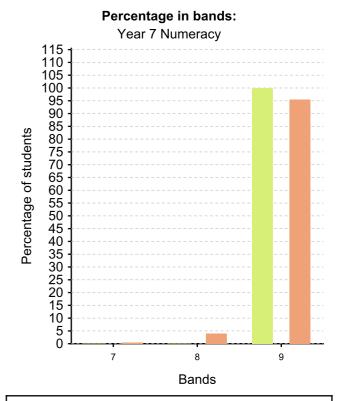
Percentage in bands: Year 9 Reading 45 40 35 20 15 10 5 Bands

School Average 2015-2017 Percentage in bands:

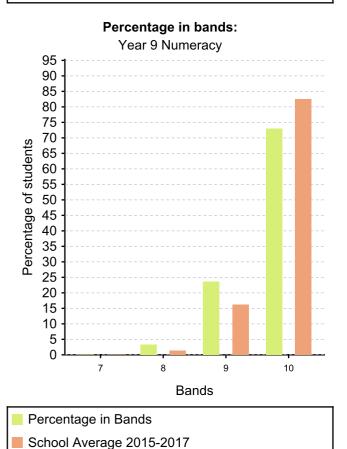
Percentage in Bands



PSHS continues to deliver outstanding numeracy results in NAPLAN. 100% of Year 7 and 97% of 9 students are at proficient level. For year 7 numeracy results, 100% of students were in the highest Band 9, which is an exceptional outcome. For Year 9, 73% of students achieved the top Band 10, an outcome that is six times higher than the state average.



■ Percentage in Bands■ School Average 2015-2017





Higher School Certificate (HSC)

The performance of students in the HSC is reported in bands ranging from Band 1 (lowest) to Band 6 (highest).

Advanced English

2017 saw the continued trend of decreasing the number of students achieving at or below the Band 4 level. 93% of students achieved at the Band 5 and 6 level, continuing the upward trend of performance in the highest bands.

Biology

Biology achieved some notable improvements in the 2017 HSC. There was an increase in Band 5 and 6 results with 2017 having the highest percentage of Band 6 results in the past 10 years. In addition, there was a decreased in Band 3 and 4 results and no Band 1 and 2 results. As a result of this, the state versus school comparison score (Z–score) was an outstanding 0.84.

Business Studies

In 2017, 90% of students achieved the top two Bands. This average for the course is 12.37% above the state average. With such a large cohort of students, this is an impressive result.

Chemistry

Chemistry achieved some significant improvements in the 2017 HSC. There was an increase in Band 5 and 6 results with 2017 having the highest percentage of Band 6 results in the past 10 years. In addition, there was a decrease in Band 4 results and there was no Band 1, 2 or 3 results. As a result of this, the state versus school comparison score (Z–score) was an impressive 0.73.

Economics

Economics has achieved some outstanding results in 2017 and continues the consistent positive trend. The 2017 Economics cohort achieved an impressive 2.91% above state average and 65% of the students receiving a Band 5 or 6.

Engineering Studies

This year 62% of students gained a band 5 or 6, 33% band 4 and 5% band 3. The average mark was 79.9 which is 6.5% above the state mean. These results are below the previous 5 years results.

Extension 1 English

In 2017, 100% of students continued to achieve in the highest two bands. 40% of students achieved at the E4 level and 60% at the E3 level.

Extension 2

English In 2017, 50% of students achieved at the E4 achievement level and 50% at the E3 achievement level. This was the school's best results since 2009.

History

The History Faculty achieved some impressive results in the 2017 HSC. Students who exceled include:

- Edward Scarlett achieved the highest HSC mark in Ancient History of 95
- Upvan Malhotra achieved the highest HSC mark in Modern History of 93
- Upvan Malhotra achieved the highest HSC mark in Legal Studies of 96
- Sarah Lewis and Hannah Monk achieved the highest HSC mark in History extension 1 of 47
- Erika Leonardo achieved the highest HSC mark in Studies of Religion of 49.

In 2017, 39.02% (64/164) of exams sat in the HSC achieved a Band 6 in Ancient History, Modern History, Legal Studies, Studies of Religion and History Extension. This was the highest number of Band 6's that the faculty has ever achieved. In addition, 88.41% (145/164) of exams sat in the 2017 HSC achieved a Band 5 or 6 in Ancient History, Modern History, Legal Studies, Studies of Religion and History Extension. Ancient History (14/13) and Studies of Religion (25/22) achieved more Band 6s than Band 5's while Extension History 3 out of 3 students achieved an equal number of E4s and E3s.

Industrial Technology Multimedia

60% of students gained a band 6, 20% band 5, 10% band 4 and 10% band 3. The average mark was 85.1 which is 17.5% above the state mean. These results are above the 2016 results and the second best results since the course was implemented in 2012.

Italian & Japanese Continuers

The LOTE faculty has continued the use of individualised feedback, the provision of extension activities, differentiated programs, student mentors and enrichment opportunities such as exchange programs with our overseas sister schools which facilitated excellent performances in both the 2 unit Italian Continuers and Japanese Continuers16.66 % of the Italian Continuers cohort achieved Band 6 and 75% of the Japanese Continuers cohort achieved Band 6.

Mathematics

HSC Mathematics students achieved wonderful results overall. In 2 unit Mathematics, 58 students achieved a Band 6 and 39 students achieved a Band 5. This means that 80.5% of our student group were in the top two bands. Overall, our Mathematics students were above the state mean for every single question. In Extension One Mathematics, 39 students earned a top band placing and 38 were in the second top band. Again, our Extension One students' school mean for every single question was above the state average. In Extension Two Mathematics, 5 students were placed in the top band and 26 were placed in the second top band, this means that every Extension Two student was placed in one of the two top bands.

PDHPE

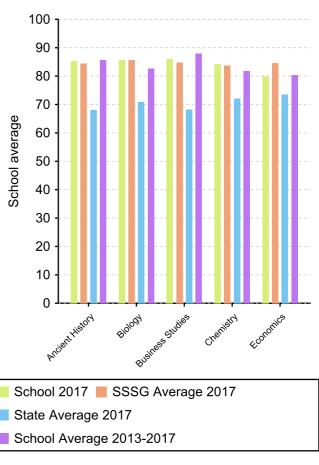
The 2 Unit PDHPE cohort has continued a consistent trend of performing above the selective high school mean. The school mean was 87.1, selective mean 86.3, state mean 69.1. A Band 6 result was achieved by 46.3% of the cohort compared to 45% for all selective schools and 8.4% of the state. The results have been facilitated by emphasising student practice of an effective written structure with consistent focus on extension work, practice questions, exemplars and peer assessment.

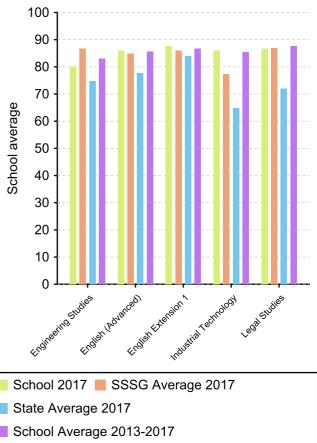
Physics

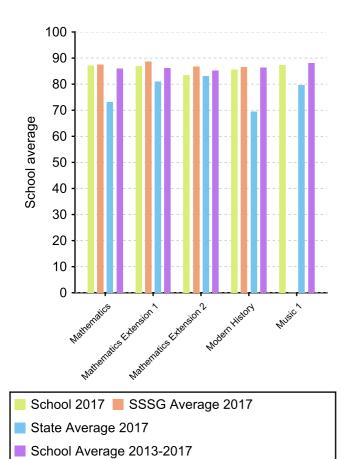
Physics achieved some significant improvements in the 2017 HSC. There was an increase in Band 5 and 6 results with 2017. In addition, there was a decrease in Band 2 and 4 results and there was no Band 1 or 2 results. As a result of this, the state versus school comparison score (Z–score) was a notable 0.57.

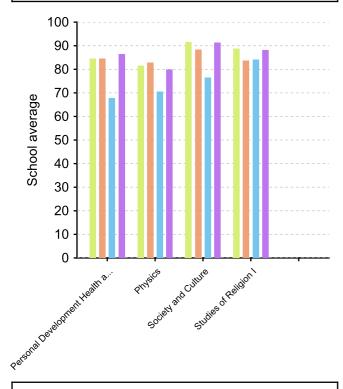
Society and Culture

The 2017 students of Society and Culture received the best result in 10 years. 78% of students received a Band 6 and no student received a result below Band 5. This course received the highest state versus school comparison for PSHS in 2017. Audrey Villafana achieved an outstanding 97 in the HSC examination.









School 2017 SSSG Average 2017		
State Average 2017		
School Average 2013-2017		

Subject	School 2017	SSSG	State	School Average 2013- 2017
Ancient History	85.3	84.5	68.1	85.7
Biology	85.7	85.7	70.9	82.7

86.0	84.9	68.2	88.0
84.2	83.7	72.1	81.8
79.9	84.6	73.6	80.5
80.1	86.7	74.8	83.1
86.0	84.9	77.6	85.6
87.6	86.0	84.0	86.7
86.0	77.3	64.8	85.5
86.8	87.0	72.1	87.7
87.1	87.5	73.2	86.0
87.0	88.6	81.0	86.2
83.5	86.7	83.1	85.3
85.7	86.5	69.6	86.4
87.3	0.0	79.7	88.2
84.5	84.4	67.7	86.4
81.5	82.9	70.4	79.8
91.6	88.3	76.4	91.2
88.8	83.7	84.0	88.1
	84.2 79.9 80.1 86.0 87.6 86.0 86.8 87.1 87.0 83.5 85.7 87.3 84.5	84.2 83.7 79.9 84.6 80.1 86.7 86.0 84.9 87.6 86.0 86.0 77.3 86.8 87.0 87.1 87.5 87.0 88.6 83.5 86.7 85.7 86.5 87.3 0.0 84.5 84.4 81.5 82.9 91.6 88.3	84.2 83.7 72.1 79.9 84.6 73.6 80.1 86.7 74.8 86.0 84.9 77.6 87.6 86.0 84.0 86.0 77.3 64.8 86.8 87.0 72.1 87.1 87.5 73.2 87.0 88.6 81.0 83.5 86.7 83.1 85.7 86.5 69.6 87.3 0.0 79.7 84.5 84.4 67.7 81.5 82.9 70.4 91.6 88.3 76.4

Parent/caregiver, student, teacher satisfaction

Parents of Penrith Selective High School continued to engage and support the school in a number of ways. Their input was sought and reflected through significant numbers at P&C, post school planning nights that attracted almost 500 parents across multiple evenings and input through surveys including a review of the school canteen. Parents also played a key role in the selection process for students applying for entry to the schools in years 8–11 as well as through membership of the curriculum committee— the group that shaped the timetable restructure for 2017, the introduction of accelerated business studies, and a consistent model for proposing courses for stages 5 and 6.



Policy requirements

Aboriginal education

Penrith Selective High School is committed to improving the educational outcomes and wellbeing of Aboriginal and Torres Strait Islander students so that they excel and achieve in every aspect of their education and training. Penrith Selective High School is committed to increasing knowledge and understanding of the histories, cultures and experiences of Aboriginal and Torres Strait Islander people as the First Peoples of Australia. The strength, diversity, ownership and richness of Aboriginal cultures and Custodianship of Country are respected, valued and promoted. The department is committed to collaborative decision making with Aboriginal Peoples, parents, caregivers, families and their communities.

Personalised Learning Plans are an effective tool for increasing Aboriginal student engagement. They have the potential to support improved learning outcomes and educational aspirations when they are developed in genuine partnership with Aboriginal students, their parents or carers and teachers. The school had an enrolment of 3 Aboriginal students and these students were met with their parents to develop a Personalised Learning Plan which was used to guide the students

through their studies during the year. Strengths and weaknesses were identified and goals were set by the students.

Divinia Eather continues to regularly incorporate Indigenous Culture and History into her class work and assessment tasks. This is particularly evident in Music and English. Divinia plays an important role in formal school assemblies where she presents the Acknowledgement of Country to recognise the Indigenous culture.

Indigenous and non–indigenous students are well supported to learn about Aboriginal culture, histories and languages through the teaching and learning programs of the school. For example, all Year 7–10 History students study Contact and Colonisation and issues confronting Aboriginal Peoples throughout the 20th Century. Aboriginal Spirituality is explored in Year 11 and 12 Studies of Religion. Aboriginal Customary Law and International Indigenous Law are taught in senior Legal Studies. In addition, the health and welfare of ATSI Peoples is studied in 2 Unit PDHPE.

Multicultural and anti-racism education

Penrith Selective High School reflects Australia's communities. Students and staff come from a diverse range of cultural, linguistic and religious backgrounds. The school is committed to building a diverse and inclusive learning environment that benefits all students including those from language backgrounds other than English. Students are prepared for engagement and participation in Australian society.

Intercultural understanding is a key capability developed at PSHS. It encourages a pluralist, just and inclusive society. Teachers understand the complexities of culture, its relationship with individual identities, views and perspectives. Teachers help students critically engage in intercultural understanding activities.

Multicultural Day 2017

"I'm confident to say that Multicultural Day 2017 was the most successful Multicultural Day I've ever been involved in, as the performances and food stalls were the most popular and busiest. The atmosphere was incredible, everyone was involved and we got the primary school involved as well. This year was our 3rd year where we involved the primary school and we got great feedback from them.

Each year our multicultural day gets better and better as we incorporate new ideas and more and more people get involved. We had performances throughout recess and lunch and both times the hall was packed. Everyone enjoyed themselves and were cheering their friends on. The food stalls had extremely long lines and every stall was sold out by the end of the day."

- -Aryenish Kavarana, SRC President
- -Lachlan Reeves, SRC Vice-President

Other school programs

English

At PSHS over 40 students were involved in external debating competitions. Overall, there were 7 debating teams that competed across 4 competitions in 2017.

Premier's Debating Competition: PSHS had many teams at different levels of the competition. They included:

- Stage 6 Competition Both teams were eliminated in the Zone stage of the competition (Year 12 Team included Megha Kapoor, Jasmine Kaur, Brindha Srinivas, Zakiyah Ullah and Eliza Yau and the Year 11 Team included Khushi Daga, Sujin Kim, Ricky Rangra, Sargunvir Saddhar, Aayushi Tripathi);
- Stage 5 Competition The PSHS Year 10 team defeated the PSHS Year 9 team in the zone finals. The Year 10 team were eliminated in the Interzone Final against Rouse Hill HS (Year 10 Team included John Maddock, Madhuvanthi Senthilkumar, Naomi Sunny, Trissha Varman and the Year 9 Team included Chinnu Anil, Hasanga Malalasekara, Sophia Hadjimichael, Amelia Wilson–Williams, Holly Gerrard);
- Stage 4 Competition The Year 8 team won all their Zone debates. In the zone final, the PSHS year 8 team defeated the PSHS Year 7 team. The Year 8 team went on to win their Interzone debate against The Ponds HS, going on to defeat Blacktown Girls HS in the Quarter–Final. The Year 8 team lost narrowly to James Ruse Agricultural HS in the Regional Semi–Final (Year 8 Team included Olivia Bock, Jamima Rumey Jiffrey, Jasraj Kaur, Vishwa Shah, Cedric Kutschera and the Year 7 Team included Gabrielle Cant, Lyndsay Everett, Marc Mumford, Abigail Quadros, Nimisha Rajesh).

The success of these students is a testament to their hard work and dedication.

Yr 11 Metro Competition: This team won all their Zone rounds and then were narrowly defeated by James Ruse in the Regional Final (Year 11 Metro Team included Grace Faulder, Vaishnavi Maheshwari, Divvya Thanabalasingam, Amber Vella (Yr 10)).

Junior State Debating Championship (JSDC): Year 10 student, John Maddock was successful in gaining a position in the representative Western Sydney Regional Debating Team. This team competed in the State Debating Championships held at Sydney University, winning the NSW Junior State Debating Competition.

Debating Enrichment: Twenty–seven Year 8 students participated in the Year 8 Debating Enrichment Program in 2017. Victoria Hospodaryk and Simone Ferreira, members of the PSHS Alumni tutored the participants.

ICAS Writing: This competition assesses students' ability to write an extended response to a given task. Two forms of writing, narrative and persuasive, are

assessed in alternating years. Those students achieved a total of 228 significant achievement awards at the merit level or higher. Notable results by year include:

- Year 7 (111 participants) 6 High Distinctions and 18 Distinctions
- Year 8 (96 participants) 2 High Distinctions and 27 Distinctions
- Year 9 (57 participants) 1 High Distinction and 9 Distinctions
- Year 10 (67 participants) 10 Distinctions
- Year 11 (22 participants) 1 High Distinction and 10 Distinctions

A total of 353 students entered ICAS Writing in 2017.

2017 year 11 student, Dharani Kumaraselvam was awarded with a University of New South Wales medal for her outstanding performance in ICAS Writing. ICAS medals are awarded to students with the top score in each year level across Australia, New Zealand and the Pacific Region.

ICAS English: This competition (compulsory participation for years 7–11) assesses reading and language skills in a range of contexts. Those students achieved a total of 563 significant achievement awards at the merit level or higher:

- Year 7 (144 participants) 3 High Distinctions and 18 Distinctions
- Year 8 (144 participants) 2 High Distinctions and 19 Distinctions
- Year 9 (145 participants) 3 High Distinction and 24 Distinctions
- Year 10 (158 participants) 2 High Distinctions and 18 Distinctions
- Year 11 (143 participants) 2 High Distinction and 24 Distinctions
- Year 12 (6 participants) 3 Distinctions

A total of 740 students entered ICAS Writing in 2017.

Public Speaking: Vaishnavi Maheshwari and Madhuvanthi Senthilkumar represented PSHS at the regional finals of the Plain English Speaking Awards.

Wide Reading Program: 2017 has been an eventful year for the English faculty at PSHS. In English, students have been engaged in powerful learning connected to their world across the year. Most notably this year, the new Wide Reading Program was implemented across 7–9. Students responded well to the opportunities they had to read for pleasure and to challenge. Participation in book clubs and opportunities to develop a personal and critical voice has seen our students performance in a range of tasks improve.

Writing Competitions: In 2017, PSHS students were offered opportunities to extend themselves through refining their writing repertoire. These included:

- · Herald Young Writer of the Year
- Dorothea McKellar Poetry Competition
- Write–4–Fun Poetry Competition
- The Whitlam Institute 'What Matters?' Competition

Across the year, over 200 entries were placed in these competitions.

History

History Teachers of NSW History Extension Essay Prize: Hannah Monk of Year 12 achieved 1st place in the History Teachers of NSW History Extension Essay Prize. This is an outstanding achievement as all schools with students studying History Extension are invited to submit their two best project essays of 2,500 words to the History Teachers Association of NSW Panel for judging.

Hannah's essay was entitled " inheritance Through Loss". Her question was "Critically evaluate the challenges presented by a dominant heritage management ideology with reference to the archaeological site of Luang Prabang." The essay was accompanied by a synopsis and annotated bibliography. Hannah received an award at The Nicholson Museum, Sydney University of \$500 and had her essay published in the history teachers journal "Teaching History." This is the third time a student from Penrith Selective HS has won this prestigious award.

Western Sydney History Mastermind Competition: This competition is open to all Year 7 and 8 students from both public and private schools from NSW. It was hosted by St Clair HS. The competition involves students participating in team s of four, with a rotating reserve, to answer sets of 20 questions on topics such as Ancient Egypt, Ancient Rome, Ancient Greece, Medieval Europe, Australian Aborigines to 1900, Popular Culture and general knowledge. The four highest scoring teams from both Years 7 and 8 play off in the finals using a beat the buzzer system.

All four PSHS teams acquitted themselves well with one Year 7 team comprised of Gabrielle Cant, Edwin Samuel, Athena Auw, Anders Ernest and Prajit Dutta achieving second place by being narrowly defeated by James Ruse Agricultural HS in the final.

Australian History Competition: The Australian History Competition involves students in Year 8 and Year 10 responding to 50 multiple choice questions based on the Australian Curriculum in History. Penrith Selective HS 58 participants in Year 8 who achieved 7 high distinctions and 13 distinctions. In Year 10 there were 54 participants with 8 high distinctions and 10 distinctions.

ANZAC Day Commemorations: The History Faculty led the annual ANZAC Day and Remembrance Day Ceremonies. Year 7 and 8 enjoyed an Ancient History and Medieval Day respectively. Year 9 experienced a presentation on World War One and Year 10 the Vietnam War. Year 12 Ancient and Modern History students had the benefit of Dr Brian Brennan's expertise where he conducted seminars on Pompeii and Herculaneum and The World War One Western Front .

Mathematics

Mathematics Enrichment Program: The faculty implemented an enrichment program for Year 8 in terms 2 and 3 in conjunction with the Australian Maths Trust program. This allowed 60 students to participate in a variety of different mathematical activities coding, spreadsheets, geogebra and problem solving. In term four 8M1 and 8M2 participated in a Project Based Learning task and designed a new lecture theatre for the school.

Staff Changes: There were many staff changes in 2017, firstly at the end of term one Mr Brian Ferguson became the new Deputy Principal for PSHS and Mrs Xiao Chirgwin became the acting head of the Mathematics Department. In Term two, we bid farewell to Mrs Rochelle Young as she had earned a promotion as Head of the Mathematics department at Nepean High School, and we welcomed Mark Clarke and Michael Harriden. In term four we welcomed Sue Briggs from James Ruse Agricultural High School. The end of the school year saw us saying farewell to Mrs Tina Bales who is taking 12 months leave after teaching at Penrith Selective High for 16 years, and also to Mrs Xiao Chirgwin who was promoted to Head of the Mathematics Department at Blacktown Boys High School. In the last week of term four we found out that Mrs Sue Briggs was successful in becoming our new Head of Mathematics.

Australian Mathematics Competition (AMC): Benjamin Renaud of Year 10 scored in the top 0.3% of NSW and earned himself a prize. Overall we received 1 prize, 17 High Distinctions, 180 distinctions and 339 credits.

ICAS Mathematics: In the ICAS competition our students earned 35 high distinctions, 252 Distinctions, 311 Credits and 42 Merits. These are our best results so far in the competitions.

Australian Problem Solving Mathematical Olympiad: All of Year 7 and two classes of Year 8 participated in the 5 problem solving tests for the Australian Problem Solving Mathematical Olympiad. The Year 8 team made up of the members of 8m1 were placed 24th overall and Niklesh Anantha—Siva achieved the "Perfect Scorer Medal" with a score of 100%. Overall 30 Students were placed in the top 10% and achieved a "Top 10% Achiever" pin. Another 81 students were placed in the top 25% and earned the "Top 25% Achiever" cloth patch.

Australian Mathematics Challenge Enrichment Stage: Students from 8m1 and 8m2 participated in this three—term enrichment program. These Year 8 students participated in the Euler programme and gained 6 Distinctions and 8 Credits. This Enrichment programme is challenging and is designed to provide meaningful maths extension to students in Years 8 and 9 by introducing them to some more advanced problem—solving ideas and techniques. It is held once a week before school with former students coming in as the tutors. In 2018, the program will be expanded so that Year 8 will study Euler and the Year 9 students will study Gauss.

Peer Tutoring Program: This involved Year 11 students working one on one with students from Years 7 to 10 who are struggling with some Mathematical concepts/topics. These sessions were conducted in the maths class rooms at lunchtimes as arranged between the student. Mrs Bales and the tutor.

Science

In Term 4 2016, the Science faculty opted to undergo an external review to help shape future faculty plans to support staff development and improve student performance. As a result, the Science faculty had a clearer understanding of student needs and had goals to improve processes and practices to support student learning. Adjustments were made to programs and assessment tasks were produced to focus on developing student skills. Approximately thirty—thousand dollars went into increasing laboratory equipment, which not only aided staff in their teaching but also allowed our students to conduct a range of independent, first—hand investigations and develop their scientific skills.

The Science faculty proactively engaged in collaborating with other selective schools, including James Ruse Agricultural High School, to unpack the new stage 6 curriculum. Staff had the opportunity to discuss their concerns, share their ideas and develop resources, with a common vision of challenging gifted and talented students. The Science faculty continued to spend faculty time planning to produce a thorough and coherent program for Year 11 Biology, Chemistry and Physics for 2019. Work will continue throughout 2018.

ICAS Science: This competition assesses students' skills in the key scientific areas. Notable achievement in each year include:

- Year 7 6 High Distinctions and 43 Distinctions
- Year 8 34 Distinctions
- Year 9 1 High Distinction and 22 Distinctions
- Year 10 4 High Distinctions and 16 Distinctions
- Year 11 2 High Distinction and 5 Distinctions

Participation in this competition was compulsory participation for years 7–11.

Australian National Chemistry Quiz (ANCQ): The ANCQ is the premium chemical education activity run by the Royal Australian Chemical Institute. In 2017, PSHS had some notable achievements including:

- 8 High Distinctions
- 40 Distinctions
- 3 High Distinction of Excellence awarded to Eric Ruan (Y7), Ram Ganesh (Y8) and Zachary Kembrey (Y11).

These three last students scored 100% in the test.

Science Olympiad: The Science Olympiad is a national extension program for top performing secondary science students. The program is a rewarding opportunity for high achieving year 10 and 11 students to extend themselves way beyond school science.

Notable achievements include:

- Zachary Kembrey (Y11) achieved a High Distinction in Chemistry and Physics.
- Alexander Feng (Y11) achieved a Distinction in Chemistry and Physics
- John Maddock (Y10) achieved a Distinction in Chemistry
- Tyler Dent (11) achieved a Distinction in Physics

The program is a rewarding opportunity for high achieving year 10 and 11 students to extend themselves way beyond school science.

Victor Chang Science Award: The Victor Chang School Science Award has been developed by the Victor ChangCardiac Research Institute to foster and encourage an interest in science among secondary school students. Zachary Kembrey received this award with the honor of attending the Victor Chang Institute.

Valid: The Validation of Assessment for Learning and Individual Development (VALID) program provides online end–of–stage assessments for the science key learning area. The assessments assist schools to monitor student achievement and inform planning, programming and assessment practice.

The Science faculty analysed student data and identified areas of focus for 2017. This has yielded much improved results for our Year 8 students with increased numbers achieving level 5/6 and reduced results in level 3/4. Students showed huge growth in areas of knowledge and understanding, problem solving and extended responses. Students improved their skills in planning and conducting but further work is required. The Science faculty has planned for and implemented a range of investigations that will continue to enhance and develop students in this area. This has been helpful with the continued growth of equipment into the science laboratories.

Overall, PSHS students performed well above average when compared to the cohort of Year 8 students who completed VALID.

Sport

Sport at PSHS is always busy and full of fantastic achievements by many students. Many students tried out for and were successful in gaining a place in Zone and Sydney West teams. Teams were entered in a wide range of CHS Knockout competitions.

Swimming: The Swimming Carnival, held early in term 1 was a great event which consisted of both Championship and novelty events. From there a 51 person team was selected to compete at the Nepean Zone Carnival where PSHS finished 5th overall— a fantastic achievement. 10 students went to Sydney West with the 16 boys relay team winning and progressing to CHS where they won a Gold Medal in the newly introduced handicap relay.

Cross Country: The Annual Cross Country Carnival was held at the beginning of Term 2. The temperature was perfect for running and a great day was had by all. Attendance and participation of students were

outstanding and the performances were stellar; 140 students attended Zone with PSHS placing second overall. 28 students qualified for Sydney West with 3 students placing in the top 3. The students were Luke Boyes (14 year boys), Andrew Davey (16 year boys) and Ivan Koudashev (17 year boys). students qualified to compete at CHS championships.

Athletics: The highlight of the year was undoubtedly the Annual Athletics Carnival. Held in School Spirit Week, the students had the opportunity to express their support for their house by dressing in house colours and supporting fellow students in their events. It is an extraordinary demonstration of school and house spirit where everyone has lots of fun, while performing to their very best in the events over 2 days. 162 students qualified to compete at the Zone Athletics Carnival. PSHS placed 2nd at the Zone Carnival with two age champions:

- · Jessie Wong in 13 years group
- Nicholas Tseung in 13 years boys

These results are outstanding and PSHS can expect great results in the future.

Social Sciences

Politics Club: After significant demand from students, Daniil Rzhevskiy of Year 10 submitted a proposal to start a social club centred on politics. As a result, Mr. MacRae has established a Politics Club for students to explore their passion for the cut and thrust of Australian politics. The club is in its establishment phase and will be running events starting in 2018. The club met multiple times to explore different voting methods and to form a committee with a President. After choosing to follow compulsory preferential vote, Ricky Rangra of Year 11 was elected as the Club President, a position he will hold for a year. Students from Year 10 and above are encouraged to participate.

Business Enterprise Challenge: Students from Year 9 Commerce classes participated in the Business Enterprise Challenge. In this challenge, a business is established from each of the Commerce classes where they sell a product to school students on a designated day. Students gain practical business experiences related to marketing, operations, finance and human resources.

Accelerated Business Studies: The Social Sciences faculty will be introducing Accelerated Business Studies. This means selected students from Year 9 will begin the Preliminary HSC course in Year 10, 2018. This is an exciting opportunity for our gifted students to complete two units of their HSC prior to the commencement of Year 12. Over 75 students attempted the entrance exam and 24 students were selected to form the first class in 2018.

Australian Geography Competition: Students entered the Australian Geography Competition and once again, PSHS have had some exciting results. Many students received outstanding results including many High Distinctions and Distinctions. Most notably, Zachary Kembrey of Year 11 achieved an equal first in Australia.

Model United Nations Assembly Competition (MUNA): MUNA is a hands—on experience of a United Nations—style conference with the aim of providing students an excellent forum to develop and practice their public speaking skills whilst debating on topical world issues. Over 30 students participated in this event.

Australian Stock Exchange (ASX) Competition: The ASX competition provides students with first–hand experience in understanding how the Australian share market operates. During the game, each syndicate is given a hypothetical \$50,000 to invest in a hypothetical share portfolio. Students buy and sell shares using actual market prices at the time of the trade. Over 260 students participated in this activity.

Relay for Life: PSHS had a huge team assembled for Relay for Life on the first of April. The event was held on April 29th and 30th. Over 130 students participated in this overnight activity to raise awareness of cancer. The students successfully raised over \$8800 for cancer research.

PCYC Entrepreneurial Learning Project: The PCYC Entrepreneurial Learning Project fosters links between PSHS and its community. In 2016, all of year 9 participated in the project that developed a sustainable garden at the Penrith PCYC. Four students were selected to travel to Melbourne to present on the project.

Davinci Decathlon: A group of year ten students (Emmanuel Thomas, Maryanna Anislag, Keshna Jeyandrabalan, Zamanda Kwan, Trissha Varman, Ruth Kim, Cyril Cherian, Julia Dungca) came fourth in the state for the cartography section of the competition.

Technical and Applied Sciences

The teachers within the TAS faculty have attended courses in e-textiles, arduino programming for 7-8 Technology Mandatory and arduino robot development for Year 10 Industrial Technology Engineering. The use of e-textiles was successfully trialled and units of work are being implemented in 2018. The NESA developed 'Crack the Code' unit of work will be trialled in 2018 and Year 10 Industrial Technology Engineering students will design, build and program an arduino robot in 2018 as a result of this professional learning. Teachers also attended the IIATE Conference and a Google STEM symposium at UWS. STEM links with the UWS are being explored for 2018 and beyond. The use of 3D CAD and 3D printing has continued to develop, with students in all TAS courses being encouraged to make use of the four 3D printers to help develop solutions for design projects.

Grok Challenge: In 2017 an emphasis was placed on encouraging students to develop their coding skills. 37 students used the Grok Learning online platform to successfully improve their programming skills.

Zero Robotics: A small team participated in the Zero Robotics programming competition and were the best

placed Australian team at the end of the individual team competition. As a result of participation in these activities, two students were successful in gaining a place in a first year computer studies course at UNSW. This course will give credit towards a university degree when completed.

Software Design and Development: Software Design and Development will be offered as a HSC subject in 2018, replacing Industrial Technology Multimedia.

Science and Engineering Challenge: Students participated in the Science and Engineering Challenge, gaining second place, and participated in the Aurecon Bridge building competition.