**

*“Inspiring and supporting young students in their pursuit of excellence”*

the sapphire foundation

***PROGRAM OVERVIEW***

[Much of the following information is also on
our website at www.sapphire-foundation.org]

**FOUNDATION MISSION**

* To support and encourage students to pursue careers in science and related disciplines
* To provide scholarships and support to secondary students with outstanding abilities in science, to assist them achieve their potential
* To encourage and promote educational and associated activities for the betterment of learning in schools
* To provide grants which can be allocated to school science-related programs and projects

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# the foundation

## background

In everyday life we are surrounded by the results of scientific inquiry, research and innovation. DVD's, mobile phones, the Internet, Bluetooth, GPS, carbon fibre, MRI scans, laser surgery and gene sequencing are just some examples of everyday items that did not exist 30 years ago. More importantly, the scientific underpinnings of many of these technologies had not even been discovered then.

Yet when secondary students are surveyed, they often don’t see the relevance of these rapid and significant scientific advances which underpin our modern life:

 Almost Some Often Very Almost
 never times often always

 Science is relevant to my future 19% 36% 23% 13% 9%

 Is useful in everyday life 18% 40% 24% 12% 6%

 Deals with things that I am 31% 36% 19% 10% 4%
 concerned about

 Helps me make decisions 35% 35% 17% 8% 4%
 about my health

 Helps me understand 12% 31% 28% 19% 10%
 environmental issues

Australian students have fallen behind other OECD countries in science and maths, and the gap is widening.

Research also shows that children in regional and rural areas don’t participate in science subjects as much as their city counterparts and their results are also lower.

Given that the rate of scientific discovery will continue (and even accelerate) over the next decades - with or without Australia participating - it is vital that all young people with ability be motivated to get involved with science. We need to overcome the perception that science and mathematics are 'boring' and 'too hard'.

Students with academic ability should be encouraged along the path of discovery - to inspire them to discover the beauty and joys of maths, physics, chemistry, biology and the earth and medical sciences.

And from a practical career point of view, science, technology and medicine (S/T/M) are areas where the jobs will be in the future, and where skills are transferable internationally.

## scope

* The Sapphire Foundation is a not-for-profit charitable fund operating on the Far South Coast of N.S.W.
* The Star Achievers scholarships, covering Years 8 to 11, are available to students attending specific local high schools, both public and private.
* The program is ongoing, with new scholarships to be awarded annually to outstanding students (typically the top 2% of students). For each school, the number of scholarships awarded each year will typically be 1 or 2 for Years 8 - 9 and similarly for Years 10 - 11. Since the selection criteria are very rigorous the actual number will vary from year to year (for example in some years there may be no new scholarships awarded in a school, other years there may be up to 3).

*Note: The scholarship numbers for each school may be capped at a maximum of 5 or 6 students at any time (i.e. across all years 8 to 11)*

* There are currently three participating schools in the Bega Valley, and this is planned to increase over time.
* The Foundation has multi-year funding in place for the scholarships. Any additional funding required for expansion will come from public and corporate grants, donations and fundraising.
* The detailed structure of programs may vary slightly between individual schools.

## timeframe

For a new participating school, the Star Achievers program will initially be announced in Spring, so that the Years 8 - 9 scholarships can be awarded and commence in the following school year.

Year 10 - 11 scholarships are not awarded in the first several years of the school’s program, as these are only available to students who have first successfully completed a Year 8 - 9 scholarship. This means that the numbers build up over time.

# star achievers program

## objectives

The Sapphire Foundation fosters the pursuit of careers in science, maths, engineering, medical science and related disciplines.

The Foundation’s ‘Star Achievers’ scholarship program identifies secondary students who have already shown an outstanding level of ability and potential (specifically in the areas of science and mathematics) and recognises and encourages them through the award of science-related scholarships.

* The strategy is to identify students with ability in their early secondary years (8 and 9) and initially spur their interest in science and maths subjects by immersing them in a range of programs and activities.
* In senior years (10 and 11), the scholarships encourage and support students who have already demonstrated academic excellence and achievement in these areas to continue their studies at the highest level and reach their full potential.
* The scholarships are ‘activity based’, comprising a range of enrichment and discovery activities and programs, both extra-curricular and in-school. These are individually developed with the scholarship winner and the funding for these is provided through the scholarship.



* Within the D.E.T. framework of accelerated learning (curriculum compacting; curriculum telescoping; mentorships; extracurricular programs; and early graduation), the Star Achievers scholarships provide extracurricular programs and mentorships, as well as enhanced individual student research projects.

We recognize that students may be gifted and talented in many areas – for example leadership, community involvement, languages, creative arts, music and sport. As a focused science program though, the Star Achiever Scholarships concentrate only on abilities specific to science and maths in its selection process.

## Program focus

* Research has shown that parents are key to supporting and encouraging a child to pursue science subjects. Active involvement and commitment of the parents is crucial to the success of each scholarship, including involvement in extracurricular activities and participation in the Foundation’s Steering Committee.
* Star Achievers is a scholarship program focussed primarily on individual outstanding students, rather than the school cohort as a whole. Our objectives do not cover programs at the school or subject level; nor does it try to raise the school’s overall participation rate of students in science/maths electives.
* The Foundation recognises that schools have limited time and resources to focus on individual programs such as the Star Achievers. The Sapphire Foundation provides coordination & management support (both directly with the student / parents and also via the teachers where appropriate).

## years 8 & 9

### structure

For the Years 8 - 9 scholarships the intent is to provide a personalised, custom framework to maximise the student’s involvement and to develop their interest further through enrichment and exploration.

This is achieved through a mix of activities such as –

* Science Experience and GERRIC 3-day vacation programs (Sydney or Wollongong) in both years
* Exhibitions and events
* Competitions
* A science or technology project in Year 8 and Year 9, under the NSW ‘Young Scientist’ structure. (The Foundation is a member of STANSW and provides the administrative support for these projects).
* Group activities (organised by the Foundation steering committee)
* Mentorships

The detailed activities are developed with the student at the start of the scholarship period and comprise a group of ‘Core’ activities and ‘Optional’ activities. Refer to the ‘Year 8-9 Activity Planner’ document for more details.

### value provided

The value of each scholarship is $4,000 over two years. This amount is used to cover the cost of planned activities including project materials, competition and fees, travel and accommodation (the student and up to one parent/carer).

As well as paying for the cost of activities and programs, the Scholarship can also cover some other items (within a total annual spend limit of $2,000) , such as -

* School uniform items (depending on school)
* Fees and textbooks (depending on school)
* Equipment
* School excursions
* Home Internet access plans

*Refer to the ‘Star Achievers Scholarship – Annual Budgeting’ document for more details.*

### Selection

Suitable students are identified by the class teacher and Head of Science towards the end of Year 7, and those students are invited to apply for a scholarship.

Applications will be restricted to Year 7 students who have already demonstrated outstanding performance and ability (typically in the top 2%) and who intend continuing to Year 12. It is expected that the student will be consistently achieving exam results in Band 6.

An interview with the parents is done before any offer is made to the student. That is, a process of –

* Identification of suitable candidates (one or two) & invitation to apply
* Joint application by the student and their parents
* Parent interview (so they understand and commit to the level of scholarship involvement required)
* Student interview with Foundation chair and Head of Science / class teacher
* Announcement

Once awarded for Year 8 the scholarship will generally extend to Year 9, subject to satisfactory performance (including exam results and bands).

## Years 10 & 11

### Structure

The Year 10 - 11 scholarship is similar in concept to Years 8 - 9, but with more focus on activities that provide challenge and which further develop the student’s particular areas of interest.

In Year 10, the vacation activities include enrolment in a 3-day Science Experience program, complemented with other extracurricular activities including involvement with professional mentors or local businesses in their area of interest.

The student will complete a Young Scientist project in Year 10, building on from their class Major Science Project (MSP)

The core scholarship activities for Year 11 are tailored specifically around the student’s interest areas in order to enable them to pursue those further. It also includes an open-ended senior research project (SRP), which is completed over the course of the year and comprises between 30 hours and 100 hours work.

The project can be either a scientific investigation, a technology project (where something is built), or a combination of the two. In any case, the student chooses the topic themselves, in an area that interests them and that will be creative and original, and completes it primarily outside school hours.

This will also be entered in the Young Scientist awards and potentially subsequent entry into the BHP Billiton awards.

Note: Because of the 100% focus on the HSC in Year 12, the scholarship program ends in Year 11.

Refer to the ‘Year 11-12 Activity Planner’ document for more details.

### Value provided

The value of each scholarship is $4,000 over two years and covers planned activities and costs similar to that of the Year 8 – 9 Scholarship. *Refer to the ‘Star Achievers Scholarship – Annual Budgeting’ document for more details.*

### Selection

Year 10 – 11 scholarships are only available to students who have successfully undertaken the Year 8 - 9 scholarship program.

The students will need to apply (and compete for) a scholarship for Years 10 - 11 and the application will include a written personal statement, along with a selection panel interview.

In Year 11, students will need to be undertaking 4 to 6 units of science and, at a minimum, 3 units of maths. It is expected that the student will be achieving exam Band 6 results consistently in both maths and science.

Evaluation and selection will be done jointly by the Principal, Head of Science and the Foundation board.

The process is –

* Application
* Selection
* Announcement

Once awarded for Year 10, the scholarship will generally continue into Year 11, subject to satisfactory performance and subject selection.

## Indigenous assistance

Where candidates are indigenous or disadvantaged, there may be additional assistance provided e.g. home resources or mentoring/coaching programs.

Such candidates will be identified by the school Principal and the opportunity and needs discussed with the Foundation.

Indigenous/disadvantaged assistance will only be offered (a) if the candidate meets all the other selection criteria and (b) after meeting with both the parents (or carers) and student, so that their needs, expectations and commitment are clearly understood. Support of the parents is key to the success of any activity-based scholarship program.

## Success Criteria

Any scholarship program needs to include criteria by which its success can be measured.

The Star Achievers success criteria include –

* Years 8 - 9

 Scholarship recipients’ exam results (bands/grades)

 Participation in competitions and external programs

Parental involvement

 The proportion of recipients who continue with a high level science/maths stream in their senior years

* Years 10 - 11

Exam results (bands/grades)

 Recipients who continue on with tertiary studies in science and related disciplines.

There will be a formal review of the program with the Principal and Head of Science in each school after the first 12 months of operation.

## scholarship CONDITIONS

Restrictions

Children of the school’s teaching staff are not eligible for these scholarships. However in certain cases (for example where the student is the top performer in the class) such a student may be offered the alternative of a Star Achievers Award. This award would entitle them to participate in the scholarship program and activities, but these will be unfunded.

Termination

The scholarship may be terminated for any reason, including but not limited to –

* Unsatisfactory student school performance
* The student project (investigation or model) not being completed
* Two consecutive absences by the parent(s) from the Steering Committee meetings (which are held once each term)
* A lack of active involvement by the parent (in supervising their student’s projects and facilitating their attendance at various vacation and local programs).

## timetable & committee

* Nomination & applications August – September (typically end Term 3)
* Interviews Term 4

 Week 2 – Parent interviews

Week 3 - Student interviews and scholarship discussion

Week 4 - Follow-up meeting with parents/student to complete paperwork & activity
 planner

* Announcement Term 4 (e.g. assembly, end-of-year awards)
* Scholarship committee School principal, Head of science & Foundation chair

## ADMINISTRATION

The level of involvement by school staff in administering the Star Achievers Scholarships has been kept to a minimum, comprising –

* Identification and selection of potential candidates
* Working with the Foundation and scholarship students to -
	+ - Develop their individual Activity Plans; and
		- Develop their ‘Young Scientist’ topics and project plans and provide assistance with those as required by the student
* Some liaison/review with the Foundation throughout the year

The primary contact point within the school will be the Head of Science for routine matters, and the Principal for any issues.

## supporting documentation

The following program materials will be provided to each school –

* Program Overview (this document)
* Star Achievers brochures
* Application Forms (students, for Year 8 - 9 scholarships)
* Application Forms (students, for Year 10 - 11 scholarships)
* Scholarship Activity Planners
* Scholarship Budgeting Guide and spreadsheet

These are also available for download from the Sapphire Foundation website.

The website also has science news and links; details of external programs and events; examples of previous ‘Young Scientist’ projects; blog and Facebook feed etc.

# contact details

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