

**Meeting the Needs of
Gifted Students
Through the Use of
Subject Acceleration
at Sydney Boys High School**

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High Potential and Gifted Education Policy 2019

- 1.3 High Potential and gifted students from all backgrounds have access to **quality learning opportunities** that meet their needs and aspirations.
- 1.3.3 Schools should provide **significant adjustments** and **interventions** in the highly gifted range to meet their advanced learning needs.

High Potential and Gifted Education Policy 2019

1.4 High potential and gifted students across all domains require **evidence-based talent development** to optimise their growth and achievement.

1.4.4 Acceleration for gifted students should be facilitated in **consultation** with the student and their parents/carers when it is in their best learning interests.

High Potential and Gifted Education Policy 2019

- 1.4.5 Enrichment, extension and extra-curricular programs for high potential and gifted students should be **sustained, challenging and purposeful**.
- 1.4.7 Specialist settings have a particular responsibility to provide **targeted talent development**, extension and advanced learning for high potential and gifted students from all backgrounds.

Prerequisites for Acceleration

- All the important learning expected in the stage outcomes statement has been achieved. That is, stage outcomes have been **mastered** by the applicant.

[We expect stage 5 outcomes to be completed by the end of Year 9]

- That the individual is **socially and emotionally ready** for advancement and that lateral extension would be insufficient.

[This is an important family consideration – autonomous and self-regulated learner]

Grouping for Acceleration

Within Class Structures

Implementing flexible progression through existing class structures is a feasible but difficult intervention. Gifted students follow individual or group programs at the next academic stage.

A teacher acts as a mentor for the individual or group as they are working independently on advanced curriculum.

Grouping for Acceleration (cont.)

Vertical Grouping

Vertical grouping is the scheduling process in which students in different Year groups are timetabled to be taught together for particular courses.

Year 10 and Year 11 are timetabled to align the subject to be taught. Year 10 students go to Year 11 classes.

[For our Year 10 electives students that means 10 of 11 periods]

Grouping for Acceleration (cont.)

Whole Class Grouping

The **most effective delivery** method for subject acceleration is whole class grouping. All the chosen students can be exposed to the same complexity of material at the same time and at the same pace.

This is the preferred mode at High.

Grouping for Acceleration (cont.)

Multiple Class Acceleration

At High we have multiple class acceleration in mathematics in Year 11.

Several classes of students are exposed to all of the stage 6 Mathematics 2-unit course and if judged to be of an acceptable standard, up to 80 may be allowed to sit the Higher School Certificate at that level in term 4, Year 11.

Support For Parents With Accelerating Students

Go to

<http://www.sydneyboyshigh.com/curriculum/subject-acceleration>

and

www.education.nsw.gov.au/teaching-and-learning/high-potential-and-gifted-education/supporting-parents-and-carers

for further information

Acceleration Assumption

- *Assumption:* Students are capable of understanding concepts and acquiring skills **faster** than their age peers for whom the comprehensive curriculum was designed.
- *Limitation:* The degree of intervention in stages 5 and 6 is limited because of instructional **time reduction**.

Eg There are normally **22** x 60 minute periods per cycle assigned for 2 unit courses over two years. Year 10 electives have only 10 periods. As a result, accelerants have only **21** periods per cycle over two years.

Selecting Students for Acceleration

- Has the student demonstrated a **comprehensive achievement well in advance** of the enrolment cohort when performance is assessed against the outcomes of the current curriculum stage?
- What level of achievement of the outcomes of the **next curriculum stage** is the student already demonstrating?

SUBJECT ACCELERATION POLICY SBHS

[sydneyboyshigh.com/curriculum/subject acceleration](http://sydneyboyshigh.com/curriculum/subject%20acceleration)

Selecting Students for Acceleration (cont.)

Capacity

Motivation to accelerate

Attainment

Autonomy as a student

Social readiness

Pattern of future study

Emootional maturity

Positives of Acceleration

- Saving time in Year 12 after completing a 2-unit course
- Increased challenge for Year 10 boys
- Having an opportunity to sit for a subject a student might not otherwise have attempted at HSC level
- Being able to focus on a subject involving a major work
- Ability to access an Extension Course not otherwise attempted
- Experiencing the HSC climate when attempting only one subject
- Understanding how much effort is required to achieve the result desired at HSC level
- Beat the 4 subject rule [4 maths + 4 English+ 2 unit X in Year 12]
- Have more units available when calculating ATAR
- Gaining greater confidence in Stage 6 cognitive challenge
- Having a safety net in case subject acceleration doesn't work out

Negatives of Acceleration

- Concerns that accelerant performance might be stronger one year later with more maturity.
- Not enough class time over the two years makes more independent learning necessary.
- Anxiety about personal capacity to succeed at acceleration raises personal stress levels.
- Time management, school communication and self organisation issues have to be addressed constantly.
- Gauging the appropriate effort required for HSC Band 6 performance in a non-high stakes year is a challenge.

Negatives of Acceleration (cont.)

- Internal communication between cohorts regarding scheduling, assessment tasks and examinations is not always error free.
- Curriculum delivery time is reduced to 21 x 60 minute periods per cycle over the two years v usual 22 x 60.
- Identification and selection procedures are department based and cannot always predict success in a new course or discipline.
- Having a safety net can be a de-motivator if a student believes a second attempt is available.

Recent Subject Acceleration Results

Modern History

Whole Class

	Number of Students	HSC Mean	Standard Deviation
2015	17	$\bar{X} = 90.82$	$\sigma = 2.65$
2016	24	$\bar{X} = 88.05$	$\sigma = 3.49$
2017	15	$\bar{X} = 89.20$	$\sigma = 2.29$
2018	10	$\bar{X} = 89.08$	$\sigma = 4.44$
2019	18	$\bar{X} = 89.44$	$\sigma = 4.92$
2020	13	$\bar{X} = 88.69$	$\sigma = 3.75$

Recent Subject Acceleration Results

Business Studies

Whole Class

	Number of Students	HSC Mean	Standard Deviation
2015	15	$\bar{X} = 93.20$	$\sigma = 2.57$
2016	13	$\bar{X} = 90.46$	$\sigma = 3.13$
2017	21	$\bar{X} = 91.52$	$\sigma = 2.68$
2018	16	$\bar{X} = 90.25$	$\sigma = 2.04$
2019	20	$\bar{X} = 89.35$	$\sigma = 3.57$
2020	20	$\bar{X} = 91.00$	$\sigma = 3.75$

Recent Subject Acceleration Results – Music 2

Whole Class

	Number of Students	HSC Mean	Standard Deviation
2015	16	$\bar{X} = 89.56$	$\sigma = 3.31$
2016	5	$\bar{X} = 92.4$	$\sigma = 1.52$
2017	3	$\bar{X} = 93.67$	$\sigma = 1.89$
2018	5	$\bar{X} = 94.00$	$\sigma = 2.38$
2019	9	$\bar{X} = 94.44$	$\sigma = 3.46$
2020	10	$\bar{X} = 94.30$	$\sigma = 2.24$

Recent Subject Acceleration Results

Geography

Vertical Grouping

	Number of Students	Mean	Standard Deviation
2015	3	$\bar{X} = 87.66$	$\sigma = 2.08$
2016	6	$\bar{X} = 90.67$	$\sigma = 1.52$
2017	5	$\bar{X} = 91.40$	$\sigma = 2.15$
2018	3	$\bar{X} = 91.00$	$\sigma = 0.0$
2019	2	$\bar{X} = 89.44$	$\sigma = 0.70$
2020	6	$\bar{X} = 91.17$	$\sigma = 1.07$

Subject Acceleration Results – Design & Technology: small class

	Number of Students	Mean	Standard Deviation
2015	3	$\bar{X} = 93.66$	$\sigma = 0.57$
2016	3	$\bar{X} = 93.33$	$\sigma = 0.47$
2018	2	$\bar{X} = 90.00$	$\sigma = 0$
2019	3	$\bar{X} = 93.33$	$\sigma = 0$
2020	1	$\bar{X} = 96$	$\sigma = 0$

Subject Acceleration Results

Visual Arts

Within Class/ Mentored

	Number of Students	Mean	Standard Deviation
2007	4	$\bar{X} = 90.7$	$\sigma = 2.82$
2015	3	$\bar{X} = 90.6$	$\sigma = 7.50$

Subject Acceleration Results Within Class Grouping or Mentoring of One – Music 1

	Number of Students	Mean	Standard Deviation
2010	3	$\bar{X} = 87.3$	$\sigma = 3.09$
2012	1	$\bar{X} = 82$	$\sigma = 0$
2014	1	$\bar{X} = 96$	$\sigma = 0$
2015	1	$\bar{X} = 96$	$\sigma = 0$

Science – Mentor Model (rare)

	Number of Students	Mean	Standard Deviation
2008	1- Chemistry	86	$\sigma = 0$
2016	1- physics	94	$\sigma = 0$
2017	1-Chemistry	93	$\sigma = 0$

Recent Subject Acceleration Results

Mathematics 2 Unit – Multiple Classes

	Number of Students	Mean	Standard Deviation
2015	80	$\bar{X} = 95.8$	$\sigma = 2.7$
2016	78	$\bar{X} = 95.4$	$\sigma = 2.2$
2017	61	$\bar{X} = 96.5$	$\sigma = 2.2$
2018	80	$\bar{X} = 95.4$	$\sigma = 2.3$
2019	78	$\bar{X} = 95.1$	$\sigma = 2.5$
2020	78	$\bar{X} = 95.3$	$\sigma = 2.2$

Seven Steps to Successful Subject Acceleration

- Identification
- Selection
- Individual Learning Plans
- Intervention Design
- Management/Monitoring
- Evaluation
- Analysis of results

Accelerated Business Studies and Geography

Identification

- Students are informed of the criteria for subject acceleration: term 3 (year 8) & term 1 (Year 9).
- During semester 1 in Year 9 students with a high level of interest in Geography and /or Commerce are identified.
- A **High Distinction or Distinction** assessment in Year 9 Commerce or core Geography is required.
- A stage 4 history of high achievement in Geography is required.
- Year 9 academic performance at least at **credit level standard in all other** subject areas.
- Students complete an Expression of Interest form and submit it to the Head Teacher of Social Science.



Accelerated Business Studies and Geography

(cont.)

Selection

- Students identified from the above criteria are interviewed by the Social Sciences Head Teacher about the 2 unit Business Studies or Geography course and subject acceleration.
- Students complete an application form for subject acceleration.
- Students' parents are contacted by the Social Science Head Teacher about the chosen 2- unit Business Studies or Geography course and subject acceleration.
- Parents are referred to the Board of Studies publication *Guidelines for Accelerated Progression* at http://www.comprehensivepsychology.com.au/assets/pdf/accelerated_guide.pdf



Accelerated Business Studies and Geography

(cont.)

Selection (cont.)

- Parental permission form is completed, signed by parents and student, dated and filed with Social Science Head Teacher.
- The lodgement of a permission form implies a parental belief that their son is a motivated, independent learner and is capable and suitable for subject acceleration, in the context of the Board of Studies policies and guidelines on accelerated learning and the Sydney Boys' High School Social Science policy for acceleration of Year 10 students.
- The chosen course should fit well with the strategic direction of the *Individual Learning Plan*.
- A final decision on successful applicants for subject acceleration is delayed until after the Year 9 examination results are analysed.
- A top 100 overall result is a prerequisite for entry to acceleration.



Accelerated Business Studies and Geography (cont.)

Individual Learning Plans

- Before commencing the higher level course each student submits a draft *Individual Learning Plan* to the Head Teacher of the subject.
- **Before** experiencing the higher level course each student is required to complete and submit to the Principal, an *Individual Learning Plan* **approved by the Head Teacher**, by the time the Year 9 results are prepared for the Principal.
- The *Individual Learning Plan* is completed according to the school template [Appendix 1].
- The Plan has to be approved by the Principal and is kept on file.



Accelerated Business Studies and Geography (cont.)

Intervention Design

- The Social Science Department compacts the stage 5 curriculum in Year 9.
- The Stage 5 class follows the stage 6 syllabus in Year 10.
- Successful students are allowed to enrol in and complete the Preliminary course.
- Accelerants are always expected to perform above the mean of the entire cohort and be on task for a band 6 performance.
- Those who aren't performing are given one chance to improve but this needs to be settled by the end of the Preliminary course.



Accelerated Business Studies and Geography (cont.)

Intervention Design (cont.)

- **Unsuccessful** students are awarded a Year 10 grade A in Geography or Commerce.
- **Marginal** students are allowed to sit the Preliminary examination on condition that they discontinue the course for Year 12.
- **Students continuing** with the Commerce Program in Year 10 will benefit from a highly differentiated Commerce Curriculum covering in depth topics related to HSC courses in Economics, Business Studies and Legal Studies. Extension and enrichment strategies will provide an increased awareness and understanding of relevant social issues and an excellent foundation for future study of these courses.



Accelerated Business Studies and Geography (cont.)

Management / Monitoring

- The establishment of and **agreement to performance standards** for each student
- The student is to achieve the objectives set out in the course requirements through:
 - demonstration by an **ability for independent, autonomous learning**.
 - completion of holiday reading tasks, **demonstrating self-regulation**.
 - class work and homework **completed on time** and at a consistently high standard.
 - completion of all assessment tasks on time and at a **consistently high standard**.
 - regular submission of project work for teacher review.



Accelerated Business Studies and Geography (cont.)

Management / Monitoring (cont.)

- Counselling of students not meeting the course performance standards.
- Students unable to maintain the agreed course performance standards in Preliminary are not allowed to progress to the HSC course.
- Students not completing Preliminary Course satisfactorily are eligible for an “A” grade in Stage 5 in Geography or the Commerce Elective.
- The usual Stage 6 monitoring and communication processes occur in terms of student assessment task feedback, student reports and warning letters to parents.
- Students are responsible for their own progress and excuses are not accepted.



Accelerated Business Studies and Geography (cont.)

Evaluation of the intervention

- How well was the above level curriculum grasped by the accelerants?
- Were any short cuts necessary?
- Was some compaction of stage 6 achievable?
- What were the effects of the intervention on work ethic?
- Did the students overcome the anxiety and stress associated with acceleration?



Individual Learning Plan

- Statement as to **why** the applicant student wants to do the course.
- Evidence of an **understanding** of the aims and benefits of the programme.
- Course **selection matrix** for Year 10-12 including numbers of units. (Year 11 – Maximum 12).
- **Statement of commitment** to the Extension Course Year 12 (where applicable).
- **Target** ATAR and tertiary **intentions**.

Accelerated Business Studies and Geography

(cont.)

Results

- An analysis of Preliminary and HSC results is undertaken annually.
- Accelerants results are compared to non-accelerated progression results.
- Single class results are compared to single class results from previous years.
- Individual results are tracked to the HSC to compare Geography or Business Studies results with the students' results in other courses.
- Are there increased Band 6s for Geography and/or Business Studies over time?
- Is there a larger candidature overall for social science in the medium term?



Individual Learning Plan (cont.)

- **Commitment Statement** to undertake necessary research/project study to excel in the course.
- Commitment to undertake **necessary vacation work** for Preliminary and HSC courses.
- Proposed **use of the time saved** by subject acceleration in Year 12.
- Student and Parent names, date and signatures included.

Why I want to do the course

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Understanding of the aims and benefits of the program

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Pattern of Study: Complete Preliminary and HSC Courses for Years 10, 11 and 12: 12 units needed for Preliminary; HSC needs 10

Subject	Y10 2021	Y11 2022	Y12 2023	Subject	Y10 2021	Y11 2022	Y12 2023
Ancient History				German Extension			
Biology				History Extension			
Business Studies				Latin Continuers			
Chemistry				Latin Extension			
Chinese Continuers				Legal Studies			
Chinese Extension				Mathematics			
Design & Technology				Mathematics Extension 1			
Drama				Mathematics Extension 2			
Economics				Modern History			
Engineering Studies				Music 1			
English Advanced		✓	✓	Music 2			
English Extension 1		✓		Music Extension			
English Extension 2				PD/Health/PE			
French Continuers				Physics			
French Extension				Software Design and Development			
Geography				Studies of Religion (1 Unit)			
German Continuers				Studies of Religion (2 Unit)			
				Visual Arts			

ATAR Target/Tertiary Study and Intentions

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Proposed use of time saved by accelerating in (subject)
(and finishing early) during Year 12

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- I agree to undertake the necessary research/project study to excel in the course
- I agree to undertake the necessary vacation work for Preliminary and HSC courses

Signed:

Student:

I have informed myself about the Board of Studies Guidelines for subject acceleration

I have discussed the proposed pattern of study with my son

I give my permission for my son to participate in this subject acceleration course

Parent/Guardian:

Date:

