

**NUTURING SCHOLAR-SPORTSMEN SINCE 1883** 

## **HSC Results 2020**

#### **Presentation to SBHS P&C**

By Dr K. A. Jaggar Monday 8<sup>th</sup> March 2021

#### **SBHS ATAR History**

- 2020 average ATAR = 92.47
  - with Standard Deviation (SD) of 7.73
  - 75.85% of students achieved ATAR ≥ 90%
- Since 2001, SBHS Average ATAR has been 92.66 with SD of 8.77
- Our segmented ATAR History Mean & Standard Deviation & % ≥ 90

Years	ATAR Mean	Standard Deviation	≥ 90%
2001 – 2005	91.29	9.77	72.28
2006 – 2010	92.89	8.00	75.64
2011 – 2015	93.68	7.33	80.16
2016 – 2020	92.79	9.70	77.41



#### **HSC Results for Class of 2020**

#### ATAR Predictor Results

<ul><li>Year 7 enrolments</li></ul>	93.12
<ul> <li>Later Years Enrolments</li> </ul>	90.14
<ul> <li>Overall Result</li> </ul>	92.47

#### Individual Results

- 2 students achieved ATAR 99.95 (max)
- 157 students (75.85%) achieved ATAR > 90
- Tail 49 students (9.39%) achieved ATAR < 80</li>

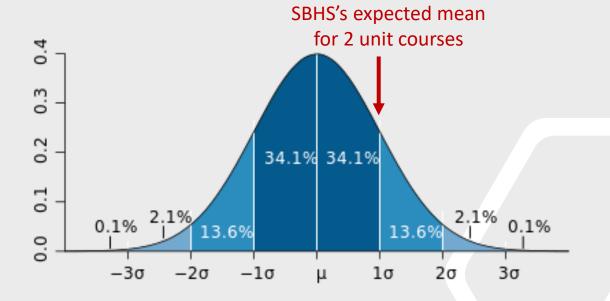
ATAR	Qty of Students
≥ 99	33
95 – 98.95	72
90 – 94.95	52
85 – 89	20
80 – 84	16
75 – 79	14
70 – 74	3
<70	3

• Of the lowest 20 ATARS, 12 students were enrolled in Year 7 in 2015



## **Explanation of Statistics Terms Used**

- Standard Deviation (σ) shows how much variation of scores or dispersion from the average (mean) exists in a population. Each band has a width of one standard deviation.
- Mean (μ) is the sum of all the numbers in the set (candidates' scores in an HSC course), divided by the amount of numbers in the set (number of candidates).





#### **Explanation of Statistics Terms Used (Cont'd)**

- School standard As 84% of scores fall below one standard deviation above the mean, we expect our school's mean in two-unit courses only, to be at the level of <u>at least one standard deviation</u> above the mean.
- Due to the scaling effects, as demonstrated later in the presentation, a target HSC mark for a <u>two-unit</u> course is 87, because any lower and the scaled score per unit x by 10 units would not amount to 371 or 90 ATAR.



#### **Explanation of Statistics Terms Used (Cont'd)**

- Z score for an HSC course is the school mean minus the state mean divided by the State standard deviation.
  - Assume a normal curve distribution.
  - Let's say the State HSC mean for a course is 74 and its standard deviation is 12.
  - Suppose at SBHS, the course mean is 86.
  - The calculated Z-Score is (86-74)/12=1.
- There are 15.8% of candidates left after the first standard deviation above the mean.
  - As it happens, ~16.5% of students who apply are awarded an ATAR of 90 or more.
  - So, 90 ATAR is the minimum standard at High
- NOTE: The distribution of marks for ATAR purposes is curvilinear.



# **Z-Score Comparison of 1 / 2-Unit Courses Highly Successful (Z-Score ≥ 1.0)**

Course	No. Students in SBHS	School Mean	Z Score
Music 1-Unit	1	97.00	1.63
Design and Technology	2	92.40	1.43
Engineering Studies	12	88.98	1.24
Business Studies	26	89.23	1.19
PD/H/PE	11	88.11	1.18
Geography	10	89.94	1.10
Software Design	7	88.63	1.09
Chemistry	126	88.66	1.06
Legal Studies	21	88.55	1.04

 Our expectations are that in 2-unit courses, our course mean should be as close to one standard deviation above the State mean as possible. N=9 for 2020



## Z-Score Comparison of 1 / 2-unit Courses (Cont'd) Successful (Z-Score = 0.75 – 0.99)

Course	No. Students in SBHS	School Mean	Z-Score
Music 2	10	93.28	0.98
Physics	122	87.17	0.94
Mathematics Advanced	163	90.57	0.93
Ancient History	6	84.33	0.85
Biology	44	82.30	0.82
Modern History	34	85.08	0.82
Chinese in Context	7	93.77	0.75
Economics	60	83.30	0.48
English Advanced	213	84.88	0.46
Visual Arts	4	85.38	0.45
Studies of Religion 2	21	80.05	0.36

# Comparison of Means of Extension Courses Highly Successful (Z-Score ≥ 0.5)

Course	No. Students in SBHS	School Mean	Z Score
Music Extension	6	49.53	0.79
Mathematics Extension 1	160	89.96	0.65

 Given the high scores and means of Extension courses in the State, if our mean is half a standard deviation above the state mean, that is a very successful result.

Course	No. Students in SBHS	School Mean	Z Score
Mathematics Extension 2	118	88.61	0.49
History Extension	5	40.32	0.32
English Extension 1	28	43.05	0.19

- Following tables describe the course
  - Statement comparing Y2020 result to that of previous years in that course at High
  - going back as far as 2001 when the new HSC began
- The Z-Score for the course is followed by two scores at the 90th percentile
- With similar pairs of scores for the 75th percentile and 50th percentile
- The first score is the HSC mark at that percentile, followed by the ATAR scaled mark at that percentile
- The standard at High for a 2-unit mark, scaled for ATAR is 74.2
- Scores highlighted in red fall below 74.2 at, before or after the 75th percentile HSC score



Course	Z-Score	HSC 90 <sup>th</sup> Percentile	ATAR Scaled 90 <sup>th</sup> Percentile	HSC 75 <sup>th</sup> Percentile	ATAR Scaled 75 <sup>th</sup> Percentile	HSC 50 <sup>th</sup> Percentile	ATAR Scaled 50 <sup>th</sup> Percentile	B 6/N
Ancient History	0.85	89	76.4	83	63.2	73	47.9	1/6

- Lowest mean since 2013
- Below long term average Z-Score

Course	Z-Score	HSC 90 <sup>th</sup> Percentile	ATAR Scaled 90 <sup>th</sup> Percentile	HSC 75 <sup>th</sup> Percentile	ATAR Scaled 75 <sup>th</sup> Percentile	HSC 50 <sup>th</sup> Percentile	ATAR Scaled 50 <sup>th</sup> Percentile	B 6/N
Biology	0.82	88	78	82	67.0	74.0	52.6	8/44

- Lowest mean since 2012
- Highest ever candidates number

Course	Z-Score	HSC 90 <sup>th</sup> Percentile	ATAR Scaled 90 <sup>th</sup> Percentile	HSC 75 <sup>th</sup> Percentile	ATAR Scaled 75 <sup>th</sup> Percentile	HSC 50 <sup>th</sup> Percentile	ATAR Scaled 50 <sup>th</sup> Percentile	B 6/N
Business Studies	1.19	89	77.2	83	65.6	74.0	48	15/26

- Best result since 2016
- Above long-term Z-Score



Course	Z-Score	HSC 90 <sup>th</sup> Percentile	ATAR Scaled 90 <sup>th</sup> Percentile	HSC 75 <sup>th</sup> Percentile	ATAR Scaled 75 <sup>th</sup> Percentile	HSC 50 <sup>th</sup> Percentile	ATAR Scaled 50 <sup>th</sup> Percentile	B 6/N
Chemistry	1.09	91	86.6	86	78.4	77	65.6	64/126

- 2nd highest mean since 2015
- Above long-term average Z-Score

Course	Z-Score	HSC 90 <sup>th</sup> Percentile	ATAR Scaled 90 <sup>th</sup> Percentile	HSC 75 <sup>th</sup> Percentile	ATAR Scaled 75 <sup>th</sup> Percentile	HSC 50 <sup>th</sup> Percentile	ATAR Scaled 50 <sup>th</sup> Percentile	B 6/N
Design and Technology	1.43	92	74.4	86	60.6	79	43.4	1/2

- Best result since 2016
- Well above long term Z-Score

Course	Z-Score	HSC 90 <sup>th</sup> Percentile	ATAR Scaled 90 <sup>th</sup> Percentile	HSC 75 <sup>th</sup> Percentile	ATAR Scaled 75 <sup>th</sup> Percentile	HSC 50 <sup>th</sup> Percentile	ATAR Scaled 50 <sup>th</sup> Percentile	B 6/N
Drama	0.02	93	79.6	87	64	79	46.2	0/4

- Lowest score since 2015
- Well-below Z-Score average



Course	Z-Score	HSC 90 <sup>th</sup> Percentile	ATAR Scaled 90 <sup>th</sup> Percentile	HSC 75 <sup>th</sup> Percentile	ATAR Scaled 75 <sup>th</sup> Percentile	HSC 50 <sup>th</sup> Percentile	ATAR Scaled 50 <sup>th</sup> Percentile	B 6/N
Economics	0.48	91	86	86	78.8	80	67.8	8/60

Lowest school mean & Z-Score since 2007

Course	Z-Score	HSC 90 <sup>th</sup> Percentile	ATAR Scaled 90 <sup>th</sup> Percentile	HSC 75 <sup>th</sup> Percentile	ATAR Scaled 75 <sup>th</sup> Percentile	HSC 50 <sup>th</sup> Percentile	ATAR Scaled 50 <sup>th</sup> Percentile	B 6/N
Engineering Studies	1.24	90	76.8	83	65.8	75	51.8	8/12

- Best result since 2014
- Well above average Z-Score

Course	Z-Score	HSC 90 <sup>th</sup> Percentile	ATAR Scaled 90 <sup>th</sup> Percentile	HSC 75 <sup>th</sup> Percentile	ATAR Scaled 75 <sup>th</sup> Percentile	HSC 50 <sup>th</sup> Percentile	ATAR Scaled 50 <sup>th</sup> Percentile	B 6/N
English Advanced	0.46	91	84	87	76.6	82	66.4	45/213

- Better result than 2019
- Highest ever State mean



Course	Z-Score	HSC 90 <sup>th</sup> Percentile	ATAR Scaled 90 <sup>th</sup> Percentile	HSC 75 <sup>th</sup> Percentile	ATAR Scaled 75 <sup>th</sup> Percentile	HSC 50 <sup>th</sup> Percentile	ATAR Scaled 50 <sup>th</sup> Percentile	B 6/N
English Extension 1	0.19	94	87.6	92	82	86	74.8	13/28

- Better result than 2019
- Well below Z-Score average

Course	Z-Score	HSC 90 <sup>th</sup> Percentile	ATAR Scaled 90 <sup>th</sup> Percentile	HSC 75 <sup>th</sup> Percentile	ATAR Scaled 75 <sup>th</sup> Percentile	HSC 50 <sup>th</sup> Percentile	ATAR Scaled 50 <sup>th</sup> Percentile	B 6/N
English Extension 2	-0.23	94	89.2	90	82.8	82	74.4	0/5

- Better result than 2019
- Well below Z-Score average

Course	Z-Score	HSC 90 <sup>th</sup> Percentile	ATAR Scaled 90 <sup>th</sup> Percentile	HSC 75 <sup>th</sup> Percentile	ATAR Scaled 75 <sup>th</sup> Percentile	HSC 50 <sup>th</sup> Percentile	ATAR Scaled 50 <sup>th</sup> Percentile	B 6/N
Geography	1.10	90	80	85	68.6	77	52.2	9/10

- Best result since 2012
- Above long-term average Z-Score



Course	Z-Score	HSC 90 <sup>th</sup> Percentile	ATAR Scaled 90 <sup>th</sup> Percentile	HSC 75 <sup>th</sup> Percentile	ATAR Scaled 75 <sup>th</sup> Percentile	HSC 50 <sup>th</sup> Percentile	ATAR Scaled 50 <sup>th</sup> Percentile	B 6/N
Legal Studies	1.04	91	79.2	86	67.2	76	50	11/21

- Highest mean since 2014
- Best Z-Score since 2015

Course	Z-Score	HSC 90 <sup>th</sup> Percentile	ATAR Scaled 90 <sup>th</sup> Percentile	HSC 75 <sup>th</sup> Percentile	ATAR Scaled 75 <sup>th</sup> Percentile	HSC 50 <sup>th</sup> Percentile	ATAR Scaled 50 <sup>th</sup> Percentile	B 6/N
Mathematics Advanced	0.93	94	86.8	89	78.2	80	64.6	112/163

- Highest mean since 2015
- Lowest ever scaled state SD

Course	Z-Score	HSC 90 <sup>th</sup> Percentile	ATAR Scaled 90 <sup>th</sup> Percentile	HSC 75 <sup>th</sup> Percentile	ATAR Scaled 75 <sup>th</sup> Percentile	HSC 50 <sup>th</sup> Percentile	ATAR Scaled 50 <sup>th</sup> Percentile	B 6/N
Mathematics Extension 1	0.65	96	95	92	90	84	82.2	116/160

- Lowest mean since 2016
- Lowest Z-Score since 2013



Course	Z-Score	HSC 90 <sup>th</sup> Percentile	ATAR Scaled 90 <sup>th</sup> Percentile	HSC 75 <sup>th</sup> Percentile	ATAR Scaled 75 <sup>th</sup> Percentile	HSC 50 <sup>th</sup> Percentile	ATAR Scaled 50 <sup>th</sup> Percentile	B 6/N
Mathematics Extension 2	0.49	95	96.6	92	94.2	86	90.2	75/118

- Highest mean since 2017
- Z-Score above average

Course	Z-Score	HSC 90 <sup>th</sup> Percentile	ATAR Scaled 90 <sup>th</sup> Percentile	HSC 75 <sup>th</sup> Percentile	ATAR Scaled 75 <sup>th</sup> Percentile	HSC 50 <sup>th</sup> Percentile	ATAR Scaled 50 <sup>th</sup> Percentile	B 6/N
Modern History	0.82	90	79	83	67.8	76	53	6/34

- Lowest mean since 2005
- Lowest Z-Score since 2014

Course	Z-Score	HSC 90 <sup>th</sup> Percentile	ATAR Scaled 90 <sup>th</sup> Percentile	HSC 75 <sup>th</sup> Percentile	ATAR Scaled 75 <sup>th</sup> Percentile	HSC 50 <sup>th</sup> Percentile	ATAR Scaled 50 <sup>th</sup> Percentile	B 6/N
History Extension	0.11	92	84.4	88	77.8	78	68.6	5/13

- Better result than 2019
- Well below long-term Z-Score



Course	Z-Score	HSC 90 <sup>th</sup> Percentile	ATAR Scaled 90 <sup>th</sup> Percentile	HSC 75 <sup>th</sup> Percentile	ATAR Scaled 75 <sup>th</sup> Percentile	HSC 50 <sup>th</sup> Percentile	ATAR Scaled 50 <sup>th</sup> Percentile	B 6/N
Music 1	1.63	93	72	89	59.2	83	41.2	2/2

- Best result since 2008
- Well above long-term average Z-Score

Course	Z-Score	HSC 90 <sup>th</sup> Percentile	ATAR Scaled 90 <sup>th</sup> Percentile	HSC 75 <sup>th</sup> Percentile	ATAR Scaled 75 <sup>th</sup> Percentile	HSC 50 <sup>th</sup> Percentile	ATAR Scaled 50 <sup>th</sup> Percentile	B 6/N
Music 2	0.98	95	90	92	80	88	68.8	10/10

- Equal best result since 2013
- Second highest mean since 2013

Course	Z-Score	HSC 90 <sup>th</sup> Percentile	ATAR Scaled 90 <sup>th</sup> Percentile	HSC 75 <sup>th</sup> Percentile	ATAR Scaled 75 <sup>th</sup> Percentile	HSC 50 <sup>th</sup> Percentile	ATAR Scaled 50 <sup>th</sup> Percentile	B 6/N
Music Extension	0.79	100	99	98	90.4	94	74.8	6/6

- Equal best result since 2017
- Second best Z-Score since 2014



Course	Z-Score	HSC 90 <sup>th</sup> Percentile	ATAR Scaled 90 <sup>th</sup> Percentile	HSC 75 <sup>th</sup> Percentile	ATAR Scaled 75 <sup>th</sup> Percentile	HSC 50 <sup>th</sup> Percentile	ATAR Scaled 50 <sup>th</sup> Percentile	B 6/N
PDHPE	1.18	89	75.4	83	62.8	74	45.4	6/11

- Highest Z-Score since 2016
- Above long-term Z-Score average

Course	Z-Score	HSC 90 <sup>th</sup> Percentile	ATAR Scaled 90 <sup>th</sup> Percentile	HSC 75 <sup>th</sup> Percentile	ATAR Scaled 75 <sup>th</sup> Percentile	HSC 50 <sup>th</sup> Percentile	ATAR Scaled 50 <sup>th</sup> Percentile	B 6/N
Physics	0.94	90	85	85	77.6	76	65.2	55/122

- Highest ever school mean
- Above long term Z-Score average

Course	Z-Score	HSC 90 <sup>th</sup> Percentile	ATAR Scaled 90 <sup>th</sup> Percentile	HSC 75 <sup>th</sup> Percentile	ATAR Scaled 75 <sup>th</sup> Percentile	HSC 50 <sup>th</sup> Percentile	ATAR Scaled 50 <sup>th</sup> Percentile	B 6/N
Software Design	1.09	91	81.6	85	69	75	51.6	3/7

- Better result than 2019
- Below long-term Z-Score average



Course	Z-Score	HSC 90 <sup>th</sup> Percentile	ATAR Scaled 90 <sup>th</sup> Percentile	HSC 75 <sup>th</sup> Percentile	ATAR Scaled 75 <sup>th</sup> Percentile	HSC 50 <sup>th</sup> Percentile	ATAR Scaled 50 <sup>th</sup> Percentile	B 6/N
Studies of Religion I	0.06	88	78.6	84	69.8	78	57.2	0/4

- Lowest Z-Score since 2008
- Lowest ever school mean

Course	Z-Score	HSC 90 <sup>th</sup> Percentile	ATAR Scaled 90 <sup>th</sup> Percentile	HSC 75 <sup>th</sup> Percentile	ATAR Scaled 75 <sup>th</sup> Percentile	HSC 50 <sup>th</sup> Percentile	ATAR Scaled 50 <sup>th</sup> Percentile	B 6/N
Studies of Religion II	0.36	88	80.2	84	70.6	78	57	0/21

- Lowest Z-Score since 2015
- Lowest mean since 2018

Course	Z-Score	HSC 90 <sup>th</sup> Percentile	ATAR Scaled 90 <sup>th</sup> Percentile	HSC 75 <sup>th</sup> Percentile	ATAR Scaled 75 <sup>th</sup> Percentile	HSC 50 <sup>th</sup> Percentile	ATAR Scaled 50 <sup>th</sup> Percentile	B 6/N
Visual Arts	0.45	92	75.6	88	61.2	83	42.4	2/4

- Highest ever State mean
- Z-Score better than 2019



Course	Z-Score	HSC 90 <sup>th</sup> Percentile	ATAR Scaled 90 <sup>th</sup> Percentile	HSC 75 <sup>th</sup> Percentile	ATAR Scaled 75 <sup>th</sup> Percentile	HSC 50 <sup>th</sup> Percentile	ATAR Scaled 50 <sup>th</sup> Percentile	B 6/N
Chinese in Context	0.75	96	85.8	94	81.4	88	68.2	7/7

- Highest State & school means since 2012
- Best Z-Score in 6 years of the course

Course	Z-Score	HSC 90 <sup>th</sup> Percentile	ATAR Scaled 90 <sup>th</sup> Percentile	HSC 75 <sup>th</sup> Percentile	ATAR Scaled 75 <sup>th</sup> Percentile	HSC 50 <sup>th</sup> Percentile	ATAR Scaled 50 <sup>th</sup> Percentile	B 6/N
Latin Continuers	-1.16	95	96.8	93	91.8	89	85.8	0/6

- Mean below long term average
- Z-Score below long-term average

Course	Z-Score	HSC 90 <sup>th</sup> Percentile	ATAR Scaled 90 <sup>th</sup> Percentile	HSC 75 <sup>th</sup> Percentile	ATAR Scaled 75 <sup>th</sup> Percentile	HSC 50 <sup>th</sup> Percentile	ATAR Scaled 50 <sup>th</sup> Percentile	B 6/N
Latin Extension	-1.39	98	97	98	92.4	96	87.8	4/7

- Worst result since new HSC began
- Well below long-term average



Course	Z-Score	HSC 90 <sup>th</sup> Percentile	ATAR Scaled 90 <sup>th</sup> Percentile	HSC 75 <sup>th</sup> Percentile	ATAR Scaled 75 <sup>th</sup> Percentile	HSC 50 <sup>th</sup> Percentile	ATAR Scaled 50 <sup>th</sup> Percentile	B 6/N
German Continuers	0.19	94	88.8	89	80.2	83	71.8	1/3

- Best result since 2015
- Highest school mean since 2015



#### **Comparing to Statistically Similar Groups**

- How well did we perform compared to our statistically similar group?
- How well did we perform against the state mean for the course?
- The following tables comprise:
  - Name of the course
  - HSC Mean for High in the course
  - Mean for the statistically similar school group
  - Mean in the course or the state
  - Difference between High means and the SSG means
- NOTE: Scores highlighted in red were below the SSG score



Course	SBHS 2020	SSG Average 2020	State Mean 2019	SBHS v SSG Difference
Ancient History	84.3	83.8	72.10	+0.5
Biology	82.6	83.9	72.39	-1.3
Business Studies	89.5	84	71.99	+5.5
Chemistry	88.9	85.6	75.52	+3.3
Economics	83.6	84.2	77.02	-0.6
Engineering Studies	89.2	86	74.2	+3.2
English (Advanced)	85.2	85.9	81.33	-0.7
English Extension 1	86.7	87.3	83.32	-0.6



Course	SBHS 2020	SSG Average 2020	State Mean 2020	SBHS v SSG Difference
Geography	90.2	89.3	74.45	+0.9
Legal Studies	88.6	87.2	74.97	+1.4
Mathematics	90.8	86.8	79.2	+4.0
Mathematics Extension 1	90.8	87.4	78.49	+3.4
Mathematics Extension 2	88.9	87.9	79.20	+1.0
Modern History	85.4	86	72.53	-0.6
Physics	87.5	84.2	73.99	+3.3
Studies of Religion II	80.4	78.4	75.5	+2



Course	SBHS 2020	SSG Average 2020	State Mean 2020	SBHS v SSG Difference
Studies of Religion 1	79.5	84.6	75.38	-5.1
Visual Arts	85.8	90.1	81.02	-4.3
English Extension 2	78.4	85.6	78.86	-7.2
German Continuers	83.7	87.3	81.32	-3.6
History Extension	81.4	84.8	76.72	-3.4
Chinese in Context	94.3	91.8	88.32	+2.5
Design & Technology	92.5	84.9	78.54	+7.6
Drama	80.8	87.9	79.62	-7.1
Latin	79	89.6	87.64	-10.6
Latin Extension	87.7	95.7	93.44	-8
Music 1	97	90.9	81.56	6.1
Music 2 Music extension	93.6 99.7	90 93.3	87.03 90.20	3.6 6.4



- First column describes the course and its number of candidates.
- In the state current highest lowest and mean since 2001.
- In the second column, there is the history of the state mean in the course current highest lowest and mean since 2001.
- In the third column, the ATAR unit value is recorded, where 25 is average.
- In the fourth column, the school ATAR scaled unit value for the average student in the course NOTE: the school standard is 37.1

#### NOTE:

- Where high or low values occur, they are coloured.
- Where school mean scaled unit values are below 37.1, they are coloured.



COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
<b>Ancient History</b>					
2020	7,164	36.3	23.2	32.56	0.85
High	12,144	37.5	25.1	37.60	1.27
Low	7,164	34.9	23.3	30.12	0.54
LTA	10,201	36.22	24.54	34.52	0.93

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
Biology					
2020	18,633	36.4	26	34.11	0.82
High	18,667	37.4	26.9	37.48	1.12
Low	12,215	35.8	25.9	33.13	0.41
LTA	15,693	36.60	26.64	35.08	0.87

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
<b>Business Studies</b>					
2020	17,877	36.2	23.9	36.83	1.19
High	17,877	37.4	24.3	40.83	1.62
Low	14,721	34.7	23.6	32.05	0.82
LTA	16,361	36.47	23.9	36.23	1.18

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
Chemistry					
2020	10,137	37.9	31.6	41.62	1.06
High	11,173	38.3	31.8	42.43	1.13
Low	8,887	34.6	31.2	38.20	0.67
LTA	10,327	37.18	31.5	40.25	0.93



COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
Economics					
2020	5,010	38.7	32	36.64	0.48
High	6,136	38.9	32.2	40.08	0.88
Low	5,010	36.9	30.6	35.16	0.40
LTA	5,396	38.15	31.39	37.91	0.67

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
<b>Engineering Studie</b>	es				
2020	2,313	37.3	25.8	37.70	1.24
High	2,257	38.2	26.0	38.63	1.39
Low	1,274	32.6	25.0	32.38	0.75
LTA	1,775	37.04	25.6	36.00	1.11



			ATAR UNIT	SCHOOL ATAR MEAN	
COURSE	NO.	STATE MEAN	VALUE SCALED	UNIT VALUE SCALED	<b>Z-SCORE</b>
<b>English Advanced</b>					
2020	24,773	40.8	32.4	35.95	0.46
High	28,066	40.8	33.2	40.28	0.99
Low	20,123	38.5	31.2	34.47	0.21
LTA	26,040	39.93	31.85	36.99	0.63

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
English Extension 1					
2020	3,551	42.1	36.4	36.72	0.19
High	6,282	42.5	38.4	41.92	0.92
Low	3,551	38.8	35.4	35.09	-0.31
LTA	4,979	40.69	36.43	38.75	0.36

			ATAR UNIT	SCHOOL ATAR MEAN	
COURSE	NO.	STATE MEAN	<b>VALUE SCALED</b>	<b>UNIT VALUE SCALED</b>	<b>Z-SCORE</b>
<b>English Extension</b>	2				
2020	1,380	40.1	36.5	35.0	-0.23
High	2,608	41.6	38.1	45.29	1.38
Low	1,326	39.0	35.2	33.43	-0.46
LTA	1,982	39.93	36.33	37.56	0.18

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
Geography					
2020	4,396	37.5	25.4	37.81	1.10
High	6,210	38.6	26.0	39.15	1.31
Low	4,109	35.9	24.8	32.84	0.75
LTA	4,654	37.39	25.36	36.29	1.03



			ATAR UNIT	SCHOOL ATAR MEAN	
COURSE	NO.	STATE MEAN	<b>VALUE SCALED</b>	<b>UNIT VALUE SCALED</b>	<b>Z-SCORE</b>
<b>Legal Studies</b>					
2020	10,651	37.7	24.9	36.28	1.04
High	10,797	38.2	25.7	38.62	1.31
Low	7,523	33.1	25.1	29.82	0.44
LTA	9,205	37.4	25.28	35.39	0.95

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
Mathematics					
2020	16,771	39.9	31.3	40.33	0.93
High	20,799	39.4	31.3	40.54	1.02
Low	16,139	36.2	29.8	34.81	0.53
LTA	17,752	38.22	30.66	38.61	0.83



			ATAR UNIT	SCHOOL ATAR MEAN	
COURSE	NO.	STATE MEAN	<b>VALUE SCALED</b>	<b>UNIT VALUE SCALED</b>	<b>Z-SCORE</b>
<b>Mathematics Exter</b>	nsion 1				
2020	8,804	39.6	39.5	44.30	0.65
High	9,955	41.0	40.1	44.75	0.83
Low	6,240	36.6	37.6	41.34	0.41
LTA	8,829	39.7	39.39	43.43	0.58

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
<b>Mathematics Exter</b>	nsion 2				
2020	3,372	40.9	43.8	46.32	0.49
High	3,512	41.9	44.7	46.71	0.70
Low	2,578	39.7	42.7	44.84	0.22
LTA	3,209	40.95	43.57	45.77	0.47



COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
<b>Modern History</b>					
2020	10,860	36.5	25.5	34.48	0.82
High	11,329	38.6	27.6	38.51	1.11
Low	8,751	37.1	25.5	32.07	0.48
LTA	10,112	37.65	26.78	35.93	0.85
			ATAR UNIT	SCHOOL ATAR MEAN	
COURSE	NO.	STATE MEAN	VALUE SCALED	UNIT VALUE SCALED	<b>Z-SCORE</b>
<b>History Extension</b>					
2020	1,746	38.8	33.7	35.47	0.25
High	2,397	42.7	35.2	40.83	0.96
Low	1,524	34.6	33.6	33.02	-0.26
LTA	2,027	38.22	34.7	37.28	0.47

			AIAK UNII	SCHOOL ATAK IVIEAN	
COURSE	NO.	STATE MEAN	<b>VALUE SCALED</b>	<b>UNIT VALUE SCALED</b>	<b>Z-SCORE</b>
Music 1 (1 score)					
2020	4,500	41.0	21.3	39.07	1.63
High	5,126	41.1	22.8	41.46	1.92
Low	3,555	37.2	21.1	26.07	0.37
LTA	4,518	39.91	21.85	33.41	1.12
			ATAR UNIT	SCHOOL ATAR MEAN	
COURSE	NO.	STATE MEAN	VALUE SCALED	UNIT VALUE SCALED	Z-SCORE
COURSE Music 2 Unit	NO.	STATE MEAN			Z-SCORE
	<b>NO.</b> 688	STATE MEAN 43.7			<b>Z-SCORE</b> 0.55
Music 2 Unit			VALUE SCALED	UNIT VALUE SCALED	
Music 2 Unit 2020	688	43.7	VALUE SCALED  33.9	UNIT VALUE SCALED 42.13	0.55

SCHOOL ATAR MEAN

			ATAR UNIT	<b>SCHOOL ATAR MEAN</b>	
COURSE	NO.	STATE MEAN	<b>VALUE SCALED</b>	<b>UNIT VALUE SCALED</b>	<b>Z-SCORE</b>
<b>Music Extension</b>					
2020	400	45.5	36.0	44.30	0.79
High	504	46.2	36.2	45.28	1.25
Low	332	41.7	33.9	31.85	-0.49
LTA	427	44.35	35.15	40.80	0.65
			ATAR UNIT	SCHOOL ATAR MEAN	
COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
COURSE PDHPE	NO.	STATE MEAN			Z-SCORE
	<b>NO.</b> 16,183	STATE MEAN 36.4			<b>Z-SCORE</b> 1.18
PDHPE	11.21		VALUE SCALED	UNIT VALUE SCALED	
<b>PDHPE</b> 2020	16,183	36.4	VALUE SCALED 23.0	UNIT VALUE SCALED 35.49	1.18



			ATAR UNIT	SCHOOL ATAR MEAN	
COURSE	NO.	STATE MEAN	<b>VALUE SCALED</b>	<b>UNIT VALUE SCALED</b>	<b>Z-SCORE</b>
Physics					
2020	7,991	37.2	30.9	40.11	0.94
High	10,158	37.8	30.9	41.18	1.11
Low	7,991	34.5	30.1	36.94	0.70
LTA	9,245	36.89	30.43	39.07	0.90



COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
Software Design					
2020	1,737	37.1	25.6	37.74	1.09
High	3,666	37.9	26.1	39.10	1.45
Low	1,608	32.8	23.6	30.53	0.48
LTA	2,071	36.61	24.7	36.28	1.13

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE				
Studies of Religion 1 Unit									
2020	8,129	38	28	28.58	0.06				
High	9,950	39.2	28.1	36.95	1.06				
Low	8,129	37.6	27.1	29.16	0.06				
LTA	9,113	38.5	27.68	31.38	0.42				



COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE				
Studies of Religion 2 Unit									
2020	6,133	38	27.4	31.1	0.36				
High	6,280	39.4	27.8	39.89	1.26				
Low	3,554	37.3	26.8	30.26	0.36				
LTA	5,306	38.17	27.35	33.19	0.59				
			ATAR UNIT	SCHOOL ATAR MEAN					
COURSE	NO.	STATE MEAN	VALUE SCALED	UNIT VALUE SCALED	<b>Z-SCORE</b>				
COURSE Visual Arts	NO.	STATE MEAN			Z-SCORE				
	<b>NO</b> . 8,526	STATE MEAN 40.7			<b>Z-SCORE</b> 0.45				
Visual Arts			VALUE SCALED	UNIT VALUE SCALED					
Visual Arts 2020	8,526	40.7	VALUE SCALED 21.9	UNIT VALUE SCALED 26.94	0.45				



#### Which University SBHS Students Attend

Course	2014	2015	2016	2017	2018	2019	2020
New South Wales	124	145	127	147	137	131	149
Sydney	41	25	38	27	38	44	30
UTS	10	3	13	7	11	12	11
Macquarie	10	6	6	8	6	10	7
Australian Catholic	3	4	1	1	6	5	5
ANU	8	7	5	4	5	3	0
Western Sydney	4	8	11	9	3	3	3
Wollongong	0	2	1	1	1	1	1
Other	5	5	4	1	0	5	2
Total	205	205	205	205	207	214	210



### **University Courses SBHS Students Study**

Course	2013	2014	2015	2016	2017	2018	2019	2020
Engineering	48	36	39	47	43	43	33	32
Commerce	50	65	64	54	50	56	50	62
Law	17	29	24	22	27	12	24	21
Arts	12	10	5	13	5	6	8	4
Science	18	12	11	18	10	36	32	26
Health Sciences	38	39	46	36	36	28	28	34
Design	3	2	0	4	6	7	6	4
Communication	0	0	3	4	1	0	0	2
International Studies	6	4	1	3	4	1	1	3
IT / Systems	5	1	6	3	16	15	28	14
Education	0	2	0	0	2	1	2	0





**NUTURING SCHOLAR-SPORTSMEN SINCE 1883** 

## Thank you.