



NUTURING SCHOLAR-SPORTSMEN SINCE 1883

# HSC Results 2021

Presentation to SBHS P&C Community

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# The League Tables

§ The HSC newspaper rankings follow a formula:

*(Band 6 / E4s earned / number of papers sat by students) x 100*

§ To get in the Top 10 in the state, a school would need c.50% of Band 6s.

§ No acknowledgement of cohort size nor difficulty of courses attempted

§ SBHS target is 600. This year, we only achieved 580.

§ We have very large numbers in the harder courses:

- Mathematics Extension 1 (174) / Extension 2 (120)
- English Advanced (213)
- Physics (116), Chemistry (125)
- Hence, it is harder to get 50% Band 6s

§ We are working hard on our weaknesses as identified by our RAP analyses.



# SBHS ATAR History

§ 2021 Average ATAR = 92.59

- with Standard Deviation (SD) of 7.54
- % boys  $\geq 90$  (78.74) Since 2001 this average is 76.37%

§ Since 2001, SBHS Average ATAR has been 92.66 with SD of 8.71

§ Our segmented ATAR History - Mean & Standard Deviation & %  $\geq 90$

Years	ATAR Mean	Standard Deviation	$\geq 90\%$
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
2021	92.59	7.54	78.74



# HSC Results for Class of 2021

## § ATAR Predictor Results

- Year 7 enrolments 93.10
- Later Years Enrolments 90.57
- Overall Result 92.59

## § Individual Results

- 2 students achieved ATAR 99.95 (max)
- 4 students were first in course
- 163 students (78.74%) achieved ATAR  $\geq 90$
- Tail 16 students (7.51%) achieved ATAR  $< 80$
- [lowest tail percentage since 2015; 2020 was 9.39]

ATAR	Qty of Students
$\geq 99$	31
95 – 98.95	74
90 – 94.95	58
85 – 89	20
80 – 84	16
75 – 79	14
70 – 74	3
$< 70$	3

§ Of the lowest 20 ATARS, 13 students were enrolled in Year 7 in 2016



# SBHS High Achievers in Courses - Top 10 State Ranking

- § Hanyang Zheng – Mathematics Extension 1; Physics 2
- § Ryan Lee – Chemistry 1; Engineering Studies 10
- § Sarfaraz Ahmed (Year 11) – Mathematics Advanced 1
- § Nicholas Arvanitellis – Latin Extension 2
- § Yifei Wu – Chinese in Context – 2
- § Cyril Vivek Subramanian – Software Design and Development 6
- § Rachit Saini (11E) Hindi Continuers – 1
  
- § Other State Ranking Achievements:
  - Chemistry – Eric Ho (7), Auguste McNally (10), Richard Bao (13)
  - Mathematics Advanced – Andy Xia (14) from Year 11
  - Engineering Studies – Ryan Lee (10)
  - Biology – Julian Waring (17)



## Bands 5 & 6 comparative Results (2021 v 2020)

Courses Up	12
Courses Down	10
Courses the Same	8

## HSC 2021 v Long Term Average (2015-2021 5&6)

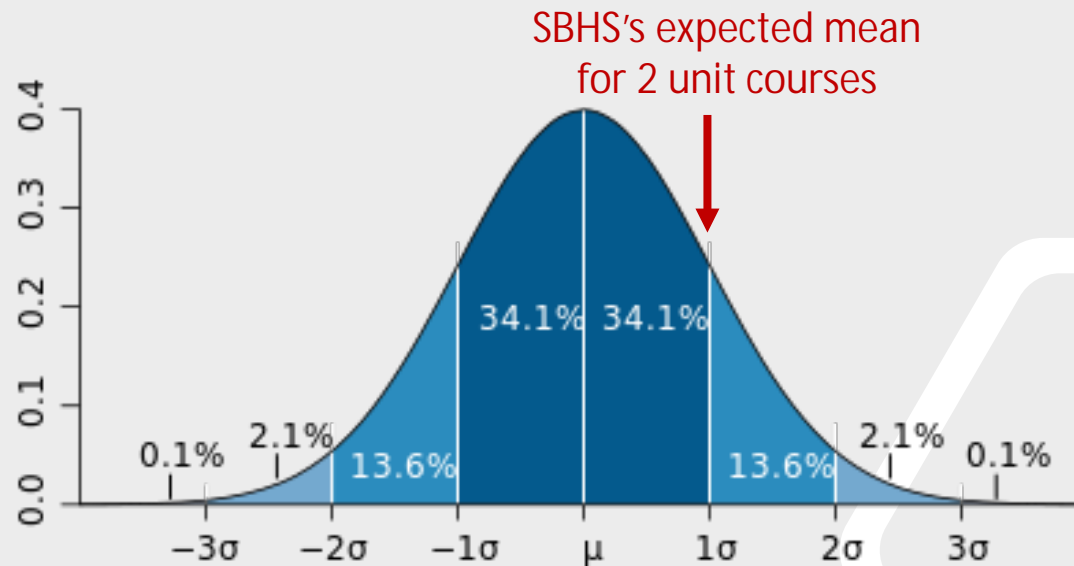
Courses Up	10
Courses Down	14
Courses the Same	6



# Explanation of Statistics Terms Used

§ **Standard Deviation** ( $\sigma$ ) 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** ( $\mu$ ) is the sum of all the numbers in the set (candidates' scores in an HSC course), divided by the 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 at least one standard deviation above the mean.

§ **Due to the scaling effects**, as demonstrated later in the presentation, a target HSC mark for a two-unit 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, ~17.9% of students who apply are awarded an ATAR of 90 or more.
- So, 90 ATAR is the minimum standard expected at High

§ NOTE: The distribution of marks for ATAR purposes is curvilinear.



# Z-Score Comparison of 2-Unit Courses

## Highly Successful (Z-Score $\geq 1.0$ )

Course	No. Students in SBHS	School Mean	Z Score
Software Design	11	92.15	1.44
Design and Technology	5	92.32	1.25
Geography	31	88.53	1.10
PD/H/PE	8	85.30	1.08
Modern History	20	88.52	1.06
Business Studies	22	87.84	1.05
Music 1	1	91.04	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=7 for 2021 (n=9, 2020)



# Z-Score Comparison of 2-unit Courses (Cont'd)

## Successful (Z-Score = 0.75 – 0.99)

Course	No. Students in SBHS	School Mean	Z-Score
Legal Studies	16	88.43	0.99
Ancient History	10	86.94	0.98
Chemistry	111	86.68	0.96
Music 2	6	93.97	0.93
Physics	115	86.71	0.92
Engineering Studies	8	85.38	0.92
Mathematics Advanced	158	89.46	0.86
Drama	8	87.48	0.85
Biology	42	82.99	0.83

Successful courses 2021 n= 9 (n=7, 2020)

# Comparison of Means of Extension Courses Highly Successful (Z-Score $\geq 0.5$ )

Course	No. Students in SBHS	School Mean	Z Score
Music Extension	2	49.15	0.87
History Extension	5	43.9	0.75
Mathematics Extension 1	174	89.96	0.52

§ 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 highly successful result.

# Highly Successful for Ext 2 courses (Z-Score $> 0.25$ )

Course	No. Students in SBHS	School Mean	Z Score
Mathematics Extension 2	120	88.72	0.43

# How did Y2021 Compare to Past HSC Results at High?

- § The following tables describe the course name and below them a statement comparing Y2021 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
- § Then similar pairs of scores for the 75th percentile and 50th percentile
- § The first score in the pair 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 equivalent at that percentile
- § The last column contains the number of band 6/E4s as a fraction of the total number of candidates in that class or group.



# How did Y2021 Compare to Past HSC Results at High?

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	76.2	83	<b>63.8</b>	71.6	46.4	4/10

§ Highest school course mean since 2018

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
Biology	0.83	88	78.6	82	<b>67.6</b>	73.8	51.8	9/42

§ Highest ever candidate numbers in the State

Improved mean and z-score over 2020 results

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	1.05	89	76.8	83	<b>64.6</b>	73.8	47.8	11/22

§ SBHS result was above long-term school mean



# How did Y2021 Compare to Past HSC Results at High?

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	0.96	91	87.2	85	79.4	74.8	63.0	53/111

§ SBHS course result above long term mean      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	75	87	61.6	79.6	45.2	5/5

§ Highest ever state mean      SBHS course result well above long-term mean      100% band 6s

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	78	87	63.8	79	47.7	5/8

§ Highest z-score since 2016      Result above long-term course mean



# How did Y2021 Compare to Past HSC Results at High?

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	0.49	91	86	86	78.4	78	63.8	15/59

§ Highest state mean since new HSC began

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	0.92	90	77.4	83	66.4	75.4	52.2	4/8

§ Highest state candidature since new HSC began      Highest scaled value at the 50th percentile since 2001

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

§ Highest state mean since new HSC began      SBHS course mean above long-term average





# How did Y2021 Compare to Past HSC Results at High?

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	-0.16	94	88.2	92	83	85.2	73.2	11/40

§ Highest state mean since new HSC began

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	-0.48	94	89.2	90	82.8	82	74.4	0/7

§ Lowest state candidature since the new HSC began

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	12/31

§ Highest SBHS candidature since new HSC began

Equal highest course z-score since 2012



# How did Y2021 Compare to Past HSC Results at High?

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	0.99	91	79.6	86	67.8	75.2	50	10/16

§ Second highest school mean since 2014

Above long-term course mean 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
Mathematics Advanced	0.86	94	86.1	89	77.6	78.8	62.8	109/158

§ Above long-term course mean

Above long-term course mean 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
Mathematics Extension 1	0.65	96	95	92	91	78.8	79.8	105/174

§ Lowest state candidature since 2008

SBHS largest candidature since 2008



# How did Y2021 Compare to Past HSC Results at High?

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	0.43	95	97	93	94.6	83.6	88	74/120

§ Equal second highest state mean since 2011

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	1.06	90	79.2	84	<b>67.8</b>	73.2	50.6	11/20

§ Above long-term course mean and 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
History Extension	0.75	94	85.6	88	77.4	78.2	<b>66.8</b>	4/5

§ Highest SBHS course mean and z-score since 2009



# How did Y2021 Compare to Past HSC Results at High?

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	1.04	93	73	88	57.8	81.8	42.2	1/1

§ Above long-term school course 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
Music 2	0.93	96	89.8	93	80.8	87.8	67	6/6

§ Above long-term school course mean and average z-score

100% Band 6s

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	0.87	100	95.8	98	85.8	89.6	70.4	2/2

§ Highest SBHS z-score since 2017

Above long-term school course mean

100% E4s



# How did Y2021 Compare to Past HSC Results at High?

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	1.08	88	75.8	82	62.6	72.6	46.2	3/8

§ Largest state HSC candidature since new HSC began      Second highest school Z-Score since 2016

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	0.92	90	85.6	85	77.6	75.8	61.2	42/115

§ Smallest state candidature since new HSC began      Above long-term school course mean and 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	1.44	91	81.2	84	68	74.6	51.2	9/11

§ Highest school course mean since new HSC began      Highest school Z-Score since 2015



# How did Y2021 Compare to Past HSC Results at High?

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-unit	0.73	90	79	84	69.2	75.6	55.2	2/11

§ Second highest school Z-Score since 2015

Above long-term school course 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 2-unit	0.63	90	80.4	86	70.6	76.4	55	3/12

§ Above long-term school course mean and average course 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
Visual Arts	0.65	91	75.6	88	61	81.4	44.2	3/8

§ Equal highest State mean since new HSC began

Above long-term school course mean



# How did Y2021 Compare to Past HSC Results at High?

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	0.57	97	87	95	76.6	89	61.4	7/7

§ Above long-term course mean and average Z-Score

100% Band 6s

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	- 0.20	95	95.4	93	92	85.8	81.6	5/8

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	4/5

§ Above long-term course mean and average z-score



# Comparing to Statistically Similar Groups

- § How well did we perform compared to our statistically similar group?
  - That is, a comparison group of selective school students, moderated for socio-economic differences)
- § 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 - **state school students only**
  - Mean for the statistically similar school group
  - Mean in the course for the state – all students
  - Difference between High means and the SSG means
- § NOTE:
  - Scores in black (n=22) were above the SSSG mean
  - Scores highlighted in red (n=10) were below the SSSG mean





Course	SBHS 2021	SSSG Average 2021	State Mean 2021	SBHS v SSG Difference
Ancient History	87.2	83.8	71.06	+1.78
Biology	83.52	85.01	73.38	-1.49
Business Studies	88.14	85.92	73.32	+2.2
Chemistry	87.01	84.52	74.37	+2.49
Economics	83.59	84.75	77.66	-1.16
Engineering Studies	86.5	86	74.79	+1.33
English (Advanced)	85.68	86.4	81.92	-0.72
English Extension 1	85.0	87.7	84.14	-2.7
English Extension 2	75.14	84.47	74.98	-9.33
Drama	88.63	88.4	78.70	+0.23



Course	SBHS 2021	SSSG Average 2021	State Mean 2021	SBHS v SSSG Difference
Geography	88.9	86.31	75.75	+2.59
Legal Studies	88.5	86.7	74.72	+1.8
Mathematics	89.89	85.66	78.41	+4.23
Mathematics Extension 1	87.87	85.85	78.21	+2.02
Mathematics Extension 2	89.13	87.75	83.07	+1.38
Modern History	88.75	85.79	72.85	+2.96
PDHPE	85.5	83.39	72.19	+2.11
Physics	87.03	84.8	75.34	+2.23
Studies of Religion 1	84.91	85.15	74.76	-0.24
Studies of Religion II	84.0	81.84	75.86	+2.16



Course	SBHS 2021	SSSG Average 2021	State Mean 2021	SBHS v SSSG Difference
Software Design	92.55	85.9	74.15	+6.65
Visual Arts	87.13	89.74	80.99	-2.61
History Extension	90.4	86.05	77.38	+4.35
Chinese in Context	94.14	94.1	88.61	+0.04
Design & Technology	92.5	84.9	78.54	+7.6
Drama	80.8	87.9	79.62	-7.1
Classical Greek Cont.	84	92	93.07	-8.0
Latin Continuers	84.25	87.49	85.35	-3.24
Latin Extension	93.6	92.24	90.72	+1.36
Music 1	91	90.23	81.34	+0.77
Music 2	94.17	90	87.57	+4.89
Music extension	99	91.32	88.94	+7.68



# Comparing Ourselves to the State Over Time

- § The 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
- § In the fifth column is the school z-score: current, high, low, average.
- § NOTE:
  - Where high or low values occur, they are coloured.
  - Where school mean scaled unit values are below 37.1, they are coloured.



# Comparing Ourselves to the State Over Time

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	ATAR Z-SCORE
<b>Ancient History</b>					
2021	6,375	35.8	23.2	33.92	0.98
High	12,144	37.5	25.1	37.60	1.27
Low	6,375	34.9	23.3	30.12	0.54
LTA	9,874	36.20	24.41	34.40	0.93

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
<b>Biology</b>					
2021	18,708	36.9	25.9	34.33	0.83
High	18,708	37.4	26.9	37.48	1.12
Low	12,215	35.8	25.9	33.13	0.41
LTA	15,836	36.61	26.58	35.05	0.86



# Comparing Ourselves to the State Over Time

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
<b>Business Studies</b>					
2021	17,662	36.9	23.9	35.18	1.05
High	17,877	37.4	24.3	40.83	1.62
Low	14,721	34.7	23.6	32.05	0.82
LTA	16,423	36.49	23.9	36.18	1.17

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
<b>Chemistry</b>					
2021	9,884	37.4	31.5	40.98	0.96
High	11,173	38.3	31.8	42.43	1.13
Low	8,887	34.6	31.2	38.20	0.67
LTA	10,306	37.19	31.5	40.28	0.93



# Comparing Ourselves to the State Over Time

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
<b>Design and Technology</b>					
2021	3,429	39.8	22.6	35.28	1.25
High	4,457	39.8	22.6	39.60	1.84
Low	3,148	34.7	21.3	18.21	-0.32
LTA	3,512	38.28	22.0	31.88	0.96

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
<b>Drama</b>					
2021	3,938	39.5	23.8	33.3	0.85
High	5,134	40	24.3	37.92	1.33
Low	3,902	37.5	23.5	22.91	-0.13
LTA	4,550	38.97	23.93	29.05	0.48



# Comparing Ourselves to the State Over Time

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
<b>Economics</b>					
2021	5,043	39.0	31.9	36.53	0.49
High	6,136	39.0	32.2	40.08	0.88
Low	5,010	36.9	30.6	35.16	0.40
LTA	5,396	38.19	31.41	37.84	0.66

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
<b>Engineering Studies</b>					
2021	2,400	37.7	26.1	34.88	0.92
High	2,400	38.2	26.1	38.63	1.39
Low	1,274	32.6	25.0	32.38	0.75
LTA	1,804	37.07	25.62	35.94	1.10





# Comparing Ourselves to the State Over Time

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
<b>English Advanced</b>					
2021	24,773	41.2	32.2	35.28	0.37
High	28,066	41.2	33.2	40.28	0.99
Low	20,123	38.5	31.2	34.47	0.21
LTA	25,963	39.99	31.86	36.91	0.62

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
<b>English Extension 1</b>					
2021	3,415	42.6	36.6	35.52	-0.16
High	6,282	42.6	38.4	41.92	0.92
Low	3,415	38.8	35.4	35.09	-0.31
LTA	4,904	40.78	36.43	38.60	0.34



# Comparing Ourselves to the State Over Time

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
<b>English Extension 2</b>					
2021	1,308	40.2	36.6	33.51	-0.23
High	2,608	41.6	38.1	45.29	1.38
Low	1,308	39.0	35.2	33.43	-0.46
LTA	1,948	39.94	36.35	37.36	0.15

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
<b>Geography</b>					
2021	4,438	38.1	25.3	37.29	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	4,644	37.42	25.35	36.34	1.03



# Comparing Ourselves to the State Over Time

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
<b>Legal Studies</b>					
2021	10,693	37.6	25.0	35.85	0.99
High	10,797	38.2	25.7	38.62	1.31
Low	7,523	33.1	24.9	29.82	0.44
LTA	9,276	37.06	25.27	35.42	0.95

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
<b>Mathematics Adv.</b>					
2021	16,769	39.4	31.4	39.48	0.86
High	20,799	39.8	31.4	40.54	1.02
Low	16,139	36.2	29.8	34.81	0.53
LTA	17,705	38.27	30.70	38.65	0.83



# Comparing Ourselves to the State Over Time

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
<b>Mathematics Extension 1</b>					
2021	8,547	39.4	39.9	43.91	0.52
High	9,955	41.0	40.1	44.75	0.83
Low	6,240	36.6	37.6	41.34	0.41
LTA	8,816	39.69	39.41	43.45	0.58

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
<b>Mathematics Extension 2</b>					
2021	3,193	41.8	44.0	46.13	0.43
High	3,512	41.9	44.7	46.71	0.70
Low	2,578	39.7	42.7	44.84	0.22
LTA	3,216	40.99	43.59	45.79	0.47



# Comparing Ourselves to the State Over Time

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
<b>Modern History</b>					
2021	10,890	36.6	25.3	36.90	1.06
High	11,329	38.6	27.6	38.51	1.11
Low	8,751	37.1	25.5	32.07	0.48
LTA	10,159	37.60	26.71	35.98	0.86

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
<b>History Extension</b>					
2021	1,742	39.1	33.4	39.03	0.75
High	2,397	42.7	35.2	40.83	0.96
Low	1,524	34.6	33.6	33.02	-0.26
LTA	2,013	38.26	34.13	37.36	0.49



# Comparing Ourselves to the State Over Time

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
<b>Music 1 2 unit</b>					
2021	4,697	40.9	21.1	32.37	1.04
High	5,126	41.1	22.8	41.46	1.92
Low	3,555	37.2	21.1	26.07	0.37
LTA	4,528	39.97	21.81	33.35	1.12

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
<b>Music 2 Unit</b>					
2021	710	43.9	33.5	41.81	0.98
High	850	44.0	34.4	43.68	1.37
Low	539	40.9	32.1	31.93	-0.05
LTA	690	42.84	33.38	38.96	0.70



# Comparing Ourselves to the State Over Time

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
<b>Music Extension</b>					
2021	381	44.8	35.2	43.55	0.87
High	504	46.2	36.2	45.28	1.25
Low	332	41.7	33.9	31.85	-0.49
LTA	424	44.37	35.15	40.95	0.66

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
<b>PDHPE</b>					
2021	16,482	36.3	23.1	34.40	1.08
High	16,482	37.7	23.7	38.74	1.50
Low	9,284	33.7	22.7	29.54	0.59
LTA	13,554	36.22	23.16	34.04	1.06



# Comparing Ourselves to the State Over Time

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
<b>Physics</b>					
2021	7,922	37.9	30.6	39.84	0.92
High	10,158	37.9	30.9	41.18	1.11
Low	7,922	34.5	30.1	36.94	0.70
LTA	9,182	36.93	30.43	39.11	0.90





# Comparing Ourselves to the State Over Time

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
<b>Software Design</b>					
2021	1,714	37.3	25.6	37.74	1.44
High	3,666	37.9	26.1	39.10	1.45
Low	1,608	32.8	23.6	30.53	0.48
LTA	2,054	36.64	24.74	36.52	1.15

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
<b>Studies of Religion 1 Unit</b>					
2021	8,389	37.8	27.6	34.23	0.73
High	9,950	39.2	28.1	36.95	1.06
Low	8,129	37.6	27.1	28.76	0.06
LTA	9,061	38.4	27.67	31.56	0.44



# Comparing Ourselves to the State Over Time

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
<b>Studies of Religion 2 Unit</b>					
2021	6,132	38.2	27.5	33.77	0.63
High	6,280	39.4	27.8	39.89	1.26
Low	3,554	37.3	26.6	30.26	0.36
LTA	5,365	38.17	27.36	33.24	0.60

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
<b>Visual Arts</b>					
2021	8,417	40.7	22.1	29.30	0.65
High	9,717	40.7	23.5	41.50	1.76
Low	8,417	36.1	21.9	26.04	0.35
LTA	9,026	39.68	22.68	32.11	0.87



# Comparing Ourselves to the State Over Time

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
<b>Chinese in Context</b>					
2021	130	44.5	30.7	36.58	0.57
High	137	44.5	30.4	38.67	0.75
Low	84	42.8	26.6	25.50	-0.50
LTA	109	43.9	31.1	32.81	0.16

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
<b>Latin Continuers</b>					
2021	154	42.9	40.8	39.32	-0.20
High	217	46.1	41.1	48.07	1.26
Low	131	42.6	39.2	32.83	-1.57
LTA	167	44.20	40.18	40.19	0.00



# Comparing Ourselves to the State Over Time

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
<b>Latin Extension</b>					
2021	101	45.8	41.4	41.24	-0.02
High	129	47.5	43.8	44.87	0.51
Low	50	44.0	41.0	21.95	-3.28
LTA	98	45.97	42.08	32.81	-0.45



# Universities SBHS Students Attend

Course	2014	2015	2016	2017	2018	2019	2020	2021	Average 1995 ->
New South Wales	124	145	127	147	137	131	149	157	94
Sydney	41	25	38	27	38	44	30	27	46
UTS	10	3	13	7	11	12	11	6	11
Macquarie	10	6	6	8	6	10	7	4	9
Australian Catholic	3	4	1	1	6	5	5	1	1
ANU	8	7	5	4	5	3	0	1	3
Western Sydney	4	8	11	9	3	3	3	4	6
Wollongong	0	2	1	1	1	1	1	1	1
Other	5	5	4	1	0	5	2	0	1
<b>Total</b>	<b>205</b>	<b>205</b>	<b>205</b>	<b>205</b>	<b>207</b>	<b>214</b>	<b>210</b>	<b>205</b>	<b>176</b>



# University Courses SBHS Students Study

Course	2013	2014	2015	2016	2017	2018	2019	2020	2021
Engineering	48	36	39	47	43	43	33	32	45
Commerce	50	65	64	54	50	56	50	62	50
Law	17	29	24	22	27	12	24	21	22
Arts	12	10	5	13	5	6	8	4	12
Science	18	12	11	18	10	36	32	26	20
Health Sciences	38	39	46	36	36	28	28	34	26
Design	3	2	0	4	6	7	6	4	5
Communication	0	0	3	4	1	0	0	2	4
International Studies	6	4	1	3	4	1	1	3	3
IT / Systems	5	1	6	3	16	15	28	14	7
Education	0	2	0	0	2	1	2	0	0





NUTURING SCHOLAR-SPORTSMEN SINCE 1883

Thank you.