



NUTURING SCHOLAR-SPORTSMEN SINCE 1883

# HSC Results 2023

**Presentation to P & C**

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# The League Tables in the Media

- HSC rankings published in newspapers follow a basic formula:  
$$= (\text{Band 6/E4s earned} \div \text{Number of papers sat by students}) \times 100$$
- To get in Top 10 in the state, a school would need approx. 50% of Band 6s.
- No acknowledgement of cohort size OR difficulty of courses attempted. Our target is 575 Band 6s. This year we only achieved 536. Rank 13.
- We have very large number of boys in harder courses. Hence, it is difficult to get to 50% Band 6s or E4s
  - Mathematics Extension 1 (180 boys)
  - Extension 2 (118 boys)
  - English Advanced (203 boys)
  - Physics (115 boys), Chemistry (104 boys)
- Since 2019 – reduced ability to plagiarise and memorise others' responses
- We are working hard on our weaknesses as identified by our RAP analyses and internal data (quantitative and qualitative). Programs are being modified and extended.
- Sentence Conscious Pedagogy program embedded in 2022-2023 for stage 4 (Stage 5 2024-5)
- Wider reading by students in Years 7-10 would help with HSC writing results. NSBHS eg



# SBHS ATAR History

- 2023 average ATAR = 91.73: SD of 8.91 . 99+ =37 (LTA =38); 95-99 =67 (LTA =73); 90+ =143 (LTA=153)
- % boys: 99 & up 17.87; 95 & up 32.37; 90-94 – 18.84;  $\geq 90$  (69.42) Since 2001 these averages are 18.94%; 36.44%; 20.51% and 75.97%.
- Since 2001, SBHS Average ATAR has been 92.55 with SD of 8.47.
- 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 - 2023	91.75	9.01	74.95



# HSC Results for Class of 2023

## ■ ATAR Predictor Results

- Year 7 enrolments 91.743
- Later Years Enrolments 91.52
- Overall Result 91.73

## ■ Individual Results

- 1 student achieved ATAR 99.95 (max)
- 143 students (69.42%) achieved ATAR  $\geq 90$
- Tail 25 students (12.08%)\* achieved ATAR  $< 80$

- [\*2022 was 12.38%; 2021 was 7.51%; 2020 was 9.39; 2019 was 10.85.  
nb LTA =9.05%]

- Of the lowest 25 ATARs, 19 students were enrolled in Year 7 in 2018 (76%)  
nb [ compare 2022 = 60%; 2021= 65%; 2020 = 60%].

ATAR	Qty of Students
$\geq 99$	37
95 – 98.95	67
90 – 94.95	39
85 – 89	29
80 – 84	11
75 – 79	14
70 – 74	3
$<70$	8



# SBHS High Achievers in Courses - Top 10 State Ranking

## State Ranks 1-10:

Chemistry	Ryan Woo (3 <sup>rd</sup> ) & Peter Zhao (7 <sup>th</sup> ).
Mathematics Extension 1	Ryan Woo (4 <sup>th</sup> ) & Felix Yi (7 <sup>th</sup> )
Software Design	Saxon Dean (6 <sup>th</sup> )
Mathematics Advanced	Ethan Pham (9 <sup>th</sup> )

## State Ranks 11-20:

Landrie (Daming) Zuo	English Advanced (19 <sup>th</sup> )
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*Well done & congratulations boys!*



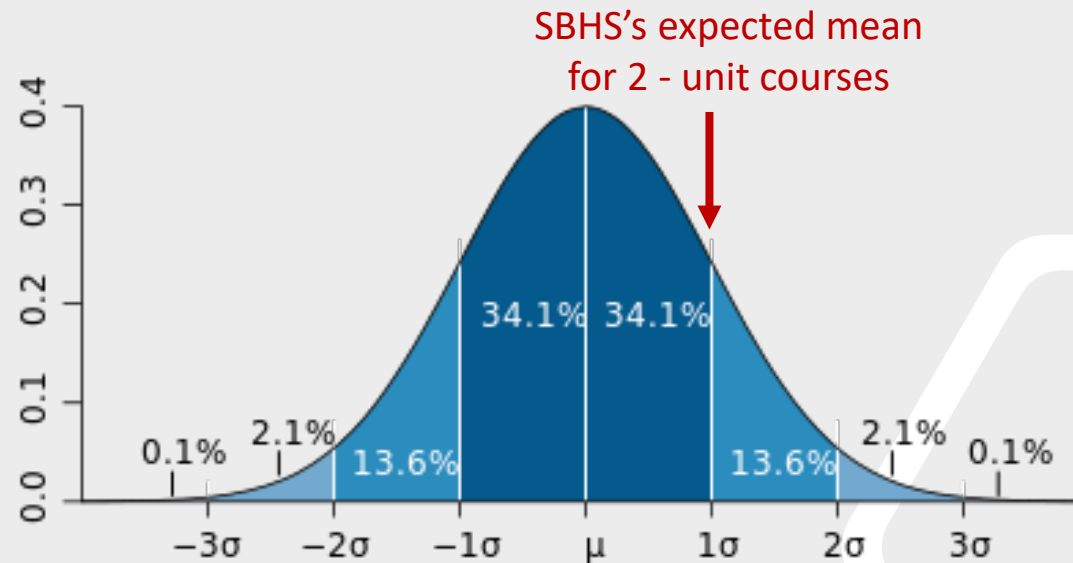
# Bands 5 & 6 Comparative Results (2023 v 2022)

- Courses Up 10
  - Courses Down 12
  - Courses the Same 8
- 
- HSC 2023 vs Long Term Average (2015-2023 for Bands 5 & 6)
    - Courses Up 8
    - Courses Down 16
    - 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 state 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
Music 1	2	97.60	1.556
Design and Technology	6	90.70	1.234
Business Studies	34	89.05	1.233
Software Design	19	88.74	1.162
Ancient History	8	88.40	1.147
chemistry	104	88.83	1.144

- 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=6 for 2023; n=8 for 2022, n=7 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
Biology	48	84.84	0.997
PDHPE	17	83.94	0.995
Physics	115	85.95	0.918
Modern History	23	85.35	0.916
Mathematics Advanced	173	87.77	0.760

- Successful courses N=5 for 2023; 2022 n= 6; n=9 2021, 2020 n = 7.

# Comparison of Means of Extension Courses

## Highly Successful (Z-Score $\geq 0.5$ )

Course	No. Students in SBHS	School Mean	Z Score
Music extension	3	49.07	0.816
English extension 2	2	44.80	0.741
Chinese extension	1	46.9	0.673

- 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.

### Means and z scores for successful Extension 2 courses (Z-scores $> 0.25 < 0.5$ )

Course	No. Students in SBHS	School Mean	Z Score
Mathematics Extension 2	118	87.73	0.451
Mathematics Extension 1	180	84.94	0.449

# How did Y2023 HSC Compare to ATAR at High?

- The following tables describe the course name and below them a statement comparing Y2023 data 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 which are the HSC score and the equivalent scaled ATAR score.
- There are similar pairs of scores for the 75th percentile and 50th 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 shows the number of band 6 / E4s as well as the number of High candidates in that course.



# How did Y2023 HSC Compare to ATAR 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	1.147	89	76.6	82	63	74	45.8	3/8

- Highest state candidature since 2020; second highest school mean ATAR value 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
Biology	0.997	89	79.8	82	68.4	74	52.6	16/48

- Highest ever candidate numbers in the State; highest school mean ATAR value and 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
Business Studies	1.233	90	77.2	84	65	75	47	19/34

- Largest ever state candidature; highest school mean ATAR value since 2016 & highest z-score since 2015.



# How did Y2023 HSC Compare to ATAR 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	1.14	91	87.4	84	79.4	76	66.6	58/104

- Highest school mean ATAR value and z-score since new HSC began; lowest school candidate numbers 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 4/6
Design and Technology	1.24	91	74.4	83	61.2	79	44.6	

- Highest mean unit ATAR value & highest school mean ATAR value 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
Drama	N/A							



# How did Y2023 HSC Compare to ATAR 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	0.73	90	85	86	77.8	79	65.6	15/54

- Highest school mean ATAR value since 2017; lowest HSC state mean since 2010.

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	0.71	89	78.6	81	66.4	74	52.4	4/18

- Highest school mean ATAR value since new HSC began; highest ever state candidature for new HSC.

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	0.36	91	84.8	87	77.4	83	67	32/203

- Highest state candidature since 2019.





# How did Y2023 HSC Compare to ATAR 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	-0.46	94	87.4	92	81.6	88	74.6	5/29

Highest state candidature number since 2018; highest ever state HSC 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 2	0.73	94	89.2	90	82.2	84	73.6	2/2

- Largest state candidature since 2018; Highest school mean, school mean ATAR value and z-score since 2017

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	0.61	89	79.38	84	68.8	78	52.2	4/11

- Highest state HSC mean since 2008 and lowest state candidature since new HSC began.



# How did Y2023 HSC Compare to ATAR 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	0.67	91	79.8	85	67.4	77	50.6	12/26

- Lowest state candidature since 2014; highest state HSC mean since 2017.

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	0.75	94	87.4	89	78.6	79	63.4	102/173

- Highest scaled ATAR unit value since new HSC began; highest ever ATAR value at the 75<sup>th</sup> percentile @ 78.6

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	0.42	95	95.4*	92	91.4	82	84.4	107/180

- Highest HSC scaled ATAR unit value since new HSC began; highest ever ATAR value at 75<sup>th</sup> percentile - 91.4.



# How did Y2023 HSC Compare to ATAR 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	94	97.2*	92	95*	86	91.6*	66/118

- Highest school mean ATAR value since 2008; HSC marks scaled up at 99<sup>th</sup>, 90<sup>th</sup>, 75<sup>th</sup> & 50<sup>th</sup> percentiles.

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	0.91	90	79.2	83	68	75	52	7/23

- Third highest z-score since 2015; lowest school candidature since 2021..

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	0.01	94	85.4	90	77.8	82	67.8	2/5

- Highest state mean since 2001.



# How did Y2023 HSC Compare to ATAR 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	1.56	93	73.2	89	59	84	42.2	2/2

- Highest ever state HSC mean; highest school mean since 2008; highest z-score since 2020.

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	0.48	95	89.6	92	81.4	87	69.8	7/13

- Lowest state HSC mean since 2012.

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	0.82	100	100	98	88.6	94	73.4	3/3

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# How did Y2023 HSC Compare to ATAR 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	0.98	88	73.8	82	61.6	74	45.6	2/17

- Highest ever state and school candidature for this 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
Physics	0.89	91	86.2	85	77.8	76	64	50/115

- Equal highest scaled ATAR unit value since new HSC began; school mean ATAR value & z-score at LTA or above.

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	1.14	91	83	84	69.6	75	53	11/19

- Lowest state candidature since 2013; equal highest number of school candidates since new HSC began.



# How did Y2023 HSC Compare to ATAR 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 1-unit	0.04	90	78.2	86	69.2	78	55.8	0/7

- Equal highest ever HSC 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
Studies of Religion 2-unit	0.41	90	80.4	85	70.8	79	56.6	3/9

- Highest state mean since 2009; highest ATAR scaled unit value 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
Visual Arts	1.01	92	75.4	88	60.8	83	41.6	3/8

- Equal highest state mean since new HSC began; highest state candidature since 2018.



# How did Y2023 HSC Compare to ATAR 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	N/A							

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	0.51	96	96.2*	92	91.6	89	83.2	0/5

- Highest state candidature since 2016; HSC marks scaled up at the 99<sup>th</sup> and 90<sup>th</sup> percentiles.

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	N/A							



# How did Y2023 HSC Compare to ATAR 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 Continuers	0.48	96	88.2	93	78.4	87	67.4	2/3

- Smallest school candidature since 2002; highest 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
Chinese extension	0.61	96	88.2	94	82	90	71	1/1

- Highest school HSC mean and school mean ATAR value since 2010; highest z-score since 2010.

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

- Lowest state candidature since 2004; highest school mean, mean ATAR value and z-score since 2012





# Comparing SBHS to Statistically Similar School Groups

- How well did we perform compared to our statistically similar school 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 2023	SSSG Average 2023	State Mean 2023	SBHS v SSG Difference
Ancient History	88.6	84.7	68.7	+3.9
Biology	85.1	84.9	71.8	+0.2
Business Studies	89.3	85.0	70.9	+4.3
Chemistry	89.1	84.5	73.7	+4.6
Economics	83.6	83.7	75.5	-0.1
Engineering Studies	81.9	85.0	73.9	-3.1
English (Advanced)	85.0	85.8	81.2	-0.8
English Extension 1	83.0	87.6	84.6	-4.6
English Extension 2	90.0	83.4	80.4	+6.4
English Standard	75.9	72.2	68.5	+3.7

Course	SBHS 2023	SSSG Average 2023	State Mean 2023	SBHS v SSSG Difference
Geography	83.5	87.4	72.5	-3.9
Legal Studies	84.1	87.1	72.9	-3.0
Mathematics	88.2	85.6	77.1	+2.6
Mathematics Extension 1	85.1	85.3	78.7	-0.2
Mathematics Extension 2	87.8	86.4	83.1	+1.4
Modern History	85.7	85.0	69.7	+0.7
PDHPE	84.2	83.9	71.0	+0.3
Physics	86.1	84.7	74.4	+1.4
Studies of Religion 1	81.1	83.7	82.7	-2.6
Studies of Religion II	84.0	81.9	71.8	-2.1

Course	SBHS 2023	SSSG Average 2023	State Mean 2023	SBHS v SSSG Difference
Software Design	89.0	84.3	72.7	+4.7
Visual Arts	85	89.5	79.8	-4.5
History Extension	81.1	86.4	78.3	-5.3
Chinese Continuers	89.7	93.8	80.1	-4.1
Classical Greek	87.0	84.0	84.5	+3.0
Latin Continuers	83.8	85.5	85.4	-1.7
Music 1	98	89.8	80.0	+8.2
Music 2	90	89.0	85.6	+1.0
Music extension	98	93.0	90.4	+5.0

# Comparing Ourselves to the State Over Time

- **1<sup>st</sup> column:** course and its number of candidates in the state: current – highest – lowest and mean since 2001
- **2<sup>nd</sup> column:** history of the state mean in the course: current – highest – lowest and mean since 2001
- **3<sup>rd</sup> column:** the State mean ATAR unit value is recorded, where 25 is average for a 2-unit course
- **4<sup>th</sup> column:** the school ATAR unit value for the average student in the course –  
NOTE: the school standard is 37.1
- **5<sup>th</sup> column:** the school z-score: current – high – low – average
- NOTE:
  - Where high or low values occur, they are coloured yellow
  - Where school mean scaled unit values are below 37.1, they are coloured red



# Comparing Ourselves to the State Over Time

COURSE	NO.	STATE MEAN	STATE ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	ATAR Z-SCORE
<b>Ancient History</b>					
2023	6,682	35.9	23	35.80	1.15
High	12,144	37.5	25.1	37.88	1.35
Low	6,336	34.9	23	30.12	0.54
LTA	9,582	36.19	24.29	34.55	0.96

COURSE	NO.	STATE MEAN	STATE ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
<b>Biology</b>					
2023	19,382	36.8	26	36.54	1.00
High	19,382	37.4	26.9	37.48	1.12
Low	12,215	35.2	25.9	33.13	0.41
LTA	15,975	36.56	26.53	35.16	0.88



# 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>					
2023	18,705	37.1	23.6	37	1.22
High	18,705	37.4	24.3	40.83	1.62
Low	14,721	34.7	23.6	32.05	0.82
LTA	16,588	36.55	23.87	36.13	1.16

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
<b>Chemistry</b>					
2023	9,892	37.2	31.7	43.14	1.14
High	11,173	38.3	31.8	43.14	1.14
Low	8,887	34.6	31.2	38.20	0.67
LTA	10,272	37.16	31.51	40.43	0.94



# 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>					
2023	3,783	38.8	22.8	36.90	1.24
High	4,457	39.8	22.8	39.60	1.84
Low	3,148	36	21.3	21.31	-0.32
LTA	3,535	38.33	22.07	32.22	0.98

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
<b>Drama</b>					
2023					
High					
Low					
LTA					



# 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>					
2023	5,515	37.3	31.2	38.37	0.73
High	6,136	39.0	32.2	40.08	0.88
Low	5,010	36.9	30.6	35.16	0.40
LTA	5,385	38.18	31.40	37.80	0.65

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
<b>Engineering Studies</b>					
2023	2,557	37.3	26.2	32.91	0.71
High	2,557	38.2	26.2	40.02	1.43
Low	1,274	32.6	25.0	32.38	0.75
LTA	1,861	37.06	25.66	35.99	1.09



# 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>					
2023	25,102	41.1	32.6	35.54	0.36
High	28,066	41.2	33.2	40.28	0.99
Low	20,123	38.5	31.2	34.47	0.21
LTA	25,869	40.08	31.90	36.83	0.60

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
<b>English Extension 1</b>					
2023	3,671	42.6	36.3	33.33	0
High	6,282	42.6	38.4	41.92	0.92
Low	3,415	38.8	35.4	33.33	-0.31
LTA	4,786	40.92	36.42	38.27	0.32



# 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>					
2023	1,408	40.7	36.3	41.13	0.73
High	2,608	41.6	38.1	45.29	1.38
Low	1,242	39.0	35.2	33.43	-0.46
LTA	1,891	40.0	36.32	37.35	0.15

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
<b>Geography</b>					
2023	4,025	38.2	25.8	35.52	0.61
High	6,210	38.6	26.0	39.15	1.31
Low	4,109	35.9	24.8	32.84	0.75
LTA	4,591	37.47	25.37	36.15	1.01



# 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>					
2023	10,224	37.8	25.1	32.49	0.67
High	10,797	38.2	25.7	38.62	1.31
Low	7,523	33.1	24.9	29.82	0.44
LTA	9,358	37.10	25.24	35.26	0.94

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
<b>Mathematics Adv.</b>					
2023	16,428	39.2	31.8	38.90	0.75
High	20,799	39.8	31.8	40.54	1.02
Low	16,139	36.2	29.8	34.81	0.53
LTA	17,613	38.36	30.79	38.74	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>					
2023	8,390	39.2	40.2	43.43	0.42
High	9,955	41.0	40.1	44.75	0.83
Low	6,240	36.6	37.6	41.34	0.41
LTA	8,792	39.47	39.47	43.47	0.57

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
<b>Mathematics Extension 2</b>					
2023	3,273	41.3	44.3	46.43	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	3,220	41.0	43.65	45.83	0.46



# 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>					
2023	10,456	36.6	25.3	35.18	0.91
High	11,329	38.6	27.6	38.51	1.11
Low	8,751	36.5	25.3	32.07	0.48
LTA	10,172	37.53	26.59	35.91	0.87

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
<b>History Extension</b>					
2023	1,730	40.2	33.5	33.59	0.01
High	2,397	42.7	35.2	40.83	0.96
Low	1,524	34.6	33.6	33.02	-0.26
LTA	1,980	38.41	34.08	37.14	0.46



# 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>					
2023	4,380	41.3	21.4	38.28	1.56
High	5,126	41.3	22.8	41.46	1.92
Low	3,555	37.2	21.1	26.07	0.37
LTA	4,507	40.10	21.76	33.62	1.14

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
<b>Music 2 Unit</b>					
2023	727	43.3	34.1	38.15	0.48
High	850	44.0	34.4	43.68	1.37
Low	539	40.9	32.1	31.93	-0.05
LTA	691	42.89	33.44	39.09	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>					
2023	386	45.4	35.8	43.55	0.82
High	504	46.2	36.6	45.28	1.25
Low	332	41.7	33.9	31.85	-0.49
LTA	419	44.50	35.25	41.03	0.66

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
<b>PDHPE</b>					
2023	16,873	36.7	22.7	33.04	0.98
High	16,873	37.7	23.7	38.74	1.50
Low	9,284	33.7	22.7	29.54	0.57
LTA	13,823	36.19	23.12	33.74	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>Physics</b>					
2023	7,921	37.6	30.9	39.76	0.89
High	10,158	37.9	30.9	41.18	1.11
Low	7,633	34.5	30.1	36.94	0.70
LTA	9,060	36.98	30.48	39.14	0.89



# 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>					
2023	1,648	37.1	26.4	38.78	1.14
High	3,666	37.9	26.1	39.10	1.45
Low	1,608	32.8	26.8	30.53	0.48
LTA	2,026	36.70	24.90	36.84	1.16

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
<b>Studies of Religion 1 Unit</b>					
2023	8,239	39.2	27.5	27.87	0.04
High	9,950	39.2	28.1	36.95	1.06
Low	8,129	37.6	27.1	27.87	0.06
LTA	8,971	38.45	27.64	31.42	0.43



# 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>					
2023	5,734	38.9	27.7	33.56	0.60
High	6,280	39.4	27.8	39.89	1.26
Low	3,554	37.3	26.6	29.90	0.36
LTA	5,433	38.24	27.36	33.05	0.57

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
<b>Visual Arts</b>					
2023	8,177	40.9	21.8	26.47	0.42
High	9,717	40.9	23.5	41.50	1.76
Low	8,177	36.1	21.9	26.04	0.35
LTA	8,946	39.79	22.61	31.91	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>Chinese in Context</b>					
2022	152	43.9	30.6	36.22	0.55
High	152	44.5	30.4	38.67	0.75
Low	84	42.8	26.6	25.50	-0.50
LTA	109	43.9	31.1	33.24	0.21

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
<b>Latin Continuers</b>					
2023	141	42.3	39.9	43.32	0.48
High	217	46.1	41.1	48.07	1.26
Low	131	42.3	39.2	32.83	-1.57
LTA	166	44.21	40.17	40.33	0.02



# 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>					
2022	83	45.8	41.4	43.73	0.31
High	129	47.5	43.8	44.87	0.51
Low	50	44.0	41.0	21.95	-3.28
LTA	97	45.97	42.05	39.79	-0.41

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
Chinese continuers					
2023	193	42.2	32.4	37.14	0.48
High	193	43.4	34	41.63	1.01
Low	75	40.4	31	37.14	0.51
LTA	107	42.37	32.43	39.40	0.692



# 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 Extension</b>					
2023	52	45	36.2	40.43	0.61
High	58	46.4	38.3	42.07	0.98
Low	31	44.8	35.2	35.94	-0.21
LTA	38	45.97	36.27	39.33	0.44

COURSE	NO.	STATE MEAN	ATAR UNIT VALUE SCALED	SCHOOL ATAR MEAN UNIT VALUE SCALED	Z-SCORE
2023					
High					
Low					
LTA					



# Which University SBHS Students Attend

Course	2015	2016	2017	2018	2019	2020	2021	2022	2023	Average
New South Wales	145	127	147	137	131	149	157	147	136	140
Sydney	25	38	27	38	44	30	27	25	41	33
UTS	3	13	7	11	12	11	6	14	13	10
Macquarie	6	6	8	6	10	7	4	6	6	7
Western Sydney	8	11	9	3	3	3	4	12	6	6
ANU	7	5	4	5	3	0	1	1	0	4
Australian Catholic	4	1	1	6	5	5	1	2	1	3
Wollongong	2	1	1	1	1	1	1	1	0	1
Other	5	4	1	0	5	2	0	1	4	1
Total	205	205	205	207	214	210	205	209	208	207



# University Courses SBHS Students Study

Course	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	LTA
Arts/Social Sciences/finance	65	64	54	50	56	47	62	56	50	53	55
Engineering	36	39	53	43	43	33	32	29	51	46	47
Health Sciences	39	46	32	36	28	34	41	32	31	40	39
Science	12	11	26	10	35	32	26	24	18	12	21
Law/ combined	29	24	20	27	12	25	21	24	19	18	22
IT/ Computing	1	6	5	16	15	22	14	22	23	27	14
Design /Bldg	2	0	4	6	7	5	4	6	6	6	4
International Studies	4	1	3	4	1	1	3	3	1	1	3
Education	2	0	0	2	1	2	0	1	4	3	1







NUTURING SCHOLAR-SPORTSMEN SINCE 1883

**Thank you.**