

WARRANE OCCASIONAL PAPERS*

NUMBER 8



AUGUST 2009

WARRANE COLLEGE IS AN AFFILIATED COLLEGE OF THE UNIVERSITY OF
NEW SOUTH WALES

FROM UNIVERSITIES ADMISSION INDEX TO AUSTRALIAN TERTIARY ADMISSION RANK: A BRIEFING PAPER

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Introduction

Staff will be aware that the Universities Admission Index (UAI) was changed to the Australian Tertiary Admission Rank (ATAR) in June 2009. This is a result of a decision in 2008 by the Australasian Conference of Tertiary Admissions Centres (ACTAC) to adopt a common name in all jurisdictions (except Queensland) for a common scale for comparing student ranks at the HSC.

There has been some resentment in schools about the lack of consultation about the changes, particularly when Professor Barry McGaw is conducting a relevant review (McGaw, 2009), and in a period when there is renewed interest in other approaches to assessment, including even latent trait theory (Kwan and Shannon, 1982, 1989; Schwartz and Sadler, 2007).

The purpose of this briefing note is to list the salient features of the ATAR against a background of the HSC. For most documentation it will merely mean a change of acronym from UAI to ATAR. More detail and numerical examples can be found on the UAC website. It is worth noting that Dr John Bennett, General Manager of the Office of the NSW Board of Studies, has been announced as the winner of the 2009 Australian College of Educators' highest state award, the Wyndham Medal, for his development of the model of standards-referenced assessment now recognised throughout Australia as best practice in measuring and reporting student achievement. It is fundamental to an understanding of the detailed calculations and their statistical foundations.

* While Warrane College accepts responsibility for publishing these papers, the opinions expressed in these papers are those of the authors. Enquiries should be directed to the Master, Warrane College, UNSW, PO Box 123, Kensington, NSW 1465, Australia.

† Response to an Australian Universities Quality Agency (AUQA) Discussion Paper, May 2009.

Changes

The UAC publication, *All About ATAR*, likens the change to reporting temperature in Celsius rather than Fahrenheit. The actual temperature does not change, just the numerical values on a differently named scale, though generally the UAI (indices) and the ATAR (ranks) will be numerically close. In the same way, the rank order of the HSC students will not change. A change will be that the highest rank is now 99.95 as opposed to 100 for the UAI. (The top ranked group will correspond to the top 0.05% of students now as distinct from the top 0.025% previously.) It is useful to compare the ATAR ranking features with the well-known features of the HSC.

HSC Marks and ATAR Ranks

- ✓ HSC marks provide information about how well a student has performed in **each** of the courses that the student has completed;
- ✓ the ATAR rank provides information about how well a student has performed **overall** against other students;

- the HSC Record of Achievement provides a **profile** of the student's performance in the different courses studied;
- the ATAR **compares** a student with students who have completed different combinations of courses;

- ❖ the HSC **marks** are reported against standards;
- ❖ the ATAR is a **rank** not a mark;

- the HSC marks are provided by the **Board of Studies**;
- the ATAR rank is provided by the **Universities Admissions Centre**.

The HSC marks

The Board of Studies describes the standards for a course using a performance scale:

- for 2-unit courses there are six performance bands;
- for extension courses there are four performance bands.

Every raw external examination mark, and every internal (school) moderated assessment mark is aligned to a performance band. It is these aligned marks, together with an HSC mark which the student receives from the Board of Studies. (A concern of some NSW HSC students is that if their class mates who did well on the internal grading perform poorly on the day in a given external examination, then they will all be down-graded as a result.) The UAC website contains a table which shows the distribution in each course of both the Board's HSC marks (as reported to students) and the scaled marks (as used in the 2008 UAI calculation) at specific percentiles. Scaling is done to compare students who have done different courses. Scaling is designed to calculate what a student's marks would have been if **all** students attempted **all** courses. The average scaled (arithmetic) mean is 50 for 2-unit courses, but in courses dominated by high-achieving students, who perform well in all their subjects, the scaled mean will be increased. Courses with many students who do not perform well in all their subjects will be scaled negatively.

Curiously, the original ‘Wyndham Scheme’ accorded “parity of esteem” to each course! (Wyndham, 1957). Now for each course:

- the strength of competition is calculated first,
- then the scaled mean,
- then the spread of scaled marks, and
- finally the maximum scaled mark.

The ATAR ranks

The purpose of the ATAR is thus to provide a measure of a student’s overall performance compared with other students. While it is based on the HSC marks, a student’s position in a course is just as important as the actual mark achieved.

ATAR courses are Board of Studies Developed courses only for which there are formal examinations conducted by the Board of Studies to yield a graded assessment. ATAR courses are classified either as Category A or Category B courses.

- Category A courses have the academic rigour and depth of knowledge to provide an adequate background for tertiary studies;
- Category B courses do not necessarily have this academic rigour and depth but their contribution to the ATAR is regarded as adequate if the other courses included in the ATAR are more academically demanding.

Again one might note that the introduction of the Wyndham Scheme in NSW after 1959 was to introduce a comprehensive education system designed to produce well-rounded citizens (Barcan, 1988).

To be eligible for an ATAR in 2009, a candidate must satisfactorily complete at least 10 units of ATAR courses. These ATAR courses must include at least (not mutually inclusive):

- 8 units from Category A courses,
- 2 units of English,
- 3 Board Developed 2 unit courses,
- 4 subjects.

The ATAR is then calculated as an aggregate of scaled marks in 10 units of these ATAR courses to include a student’s

- best 2 units of English, and
- best 8 units from the remaining units.

Conclusion

For most students the effects of the change will be small. There should be no change in the likelihood of individual students gaining admission to their preferred courses, as any change in the ATARs, compared with the corresponding UAI, should be compensated by an equivalent change in the course cut-offs.

Some NSW HSC students have expressed concern that ATARs will make it easier for students from other jurisdictions with internal HSC assessments of varying subjectivity to gain access to NSW universities. That they are reflecting on a variety of educational assessment procedures reflects well on their intellectual maturity. There are also a number of alternative pathways for Australian applicants who have an ATAR below the published cut-off (UAC, 2009). There are also “National VTE-University Credit Transfer Guidelines” collated by *Universities Australia* of interest to students at providers of Vocational and Technical Education – formerly Vocational Education and Training. For a comprehensive account of many of the background issues see Athanasou and Lampiranou (1992) and Nuttall (1996).

Finally, the minimum school leaving age in NSW is being raised from 15 to 17 (or completion of the School Certificate) in 2011. This will lead to a change in the NSW ranks as all students will then complete Year 10.

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