

CURTIN’S KEY PERFORMANCE INDICATORS

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CERTIFICATION OF KEY PERFORMANCE INDICATORS

We hereby certify that the performance indicators are based on proper records, are relevant and appropriate for assisting users to access Curtin University of Technology’s performance, and fairly represent the performance of Curtin University of Technology for the financial year ended 31 December 2015.



Colin Beckett
Chancellor



Deborah Terry
Vice-Chancellor

On behalf of the University Council

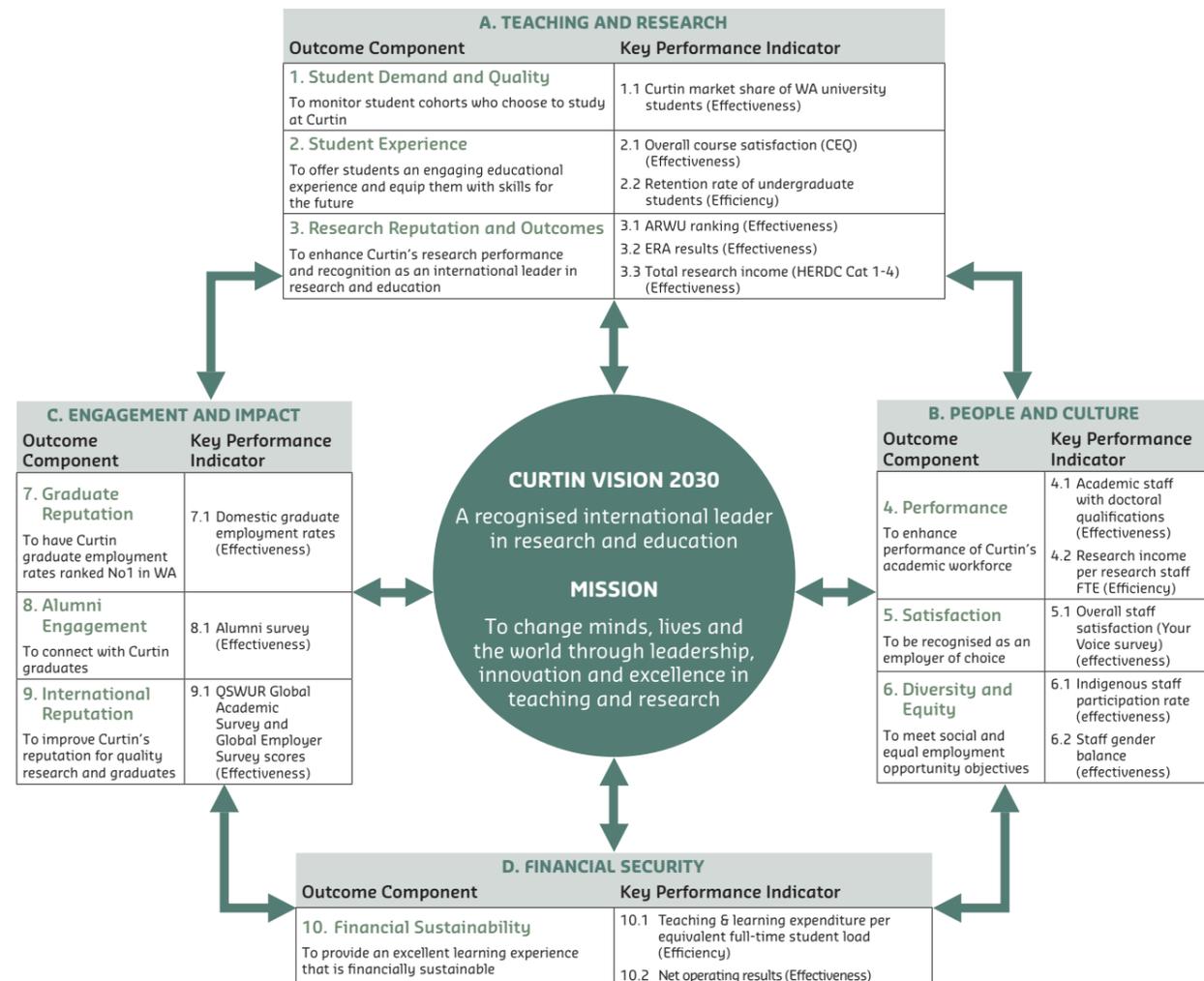
Dated this 16th day on March 2016

CURTIN ANNUAL REPORT 2015 KEY PERFORMANCE INDICATORS

Curtin’s mission statement: *To change minds, lives and the world through leadership, innovation and excellence in teaching and research* reflects the University’s purpose and overarching outcome. To achieve its mission, the University assesses its performance across a series of outcome components and key performance indicators related to the demand for Curtin courses, experience of its students and the reputation of its graduates; research outputs; performance of its academic workforce; and the efficiency of its teaching and learning activities. These are set out in a balanced scorecard framework over four interdependent themes to provide a holistic and balanced view of the University’s performance.

In this year’s Annual Report, a number of new key performance indicators have been added. The selection of indicators reflect those that are designed to demonstrate progress towards achieving targets as outlined in the Curtin Strategic Plan (2013-2017) and Enabling Plans.

Performance indicators are classified as either *effectiveness* or *efficiency*. A summary of the *Outcome Components and Key Performance Indicators* is presented below:



A. TEACHING AND RESEARCH

Outcome Component: 1. Student Demand and Quality

Monitoring the market share of total commencements provides an assessment of strength of student demand across all student cohorts. Tertiary Institutions Service Centre (TISC) first preferences indicate WA domestic student demand for Curtin undergraduate courses and the share of high Australian Tertiary Admission Rank (ATAR) (above 95%) enrolment indicates the calibre of domestic undergraduate students enrolling into Curtin courses. Taken together, the measures reflect the value and reputation of Curtin courses in the WA university sector.

Key Performance Indicator:

1.1 Curtin market share of WA university students – commencing enrolments and TISC domestic undergraduate applicants

This is a new key performance indicator for 2015.

Classification: Effectiveness measure

Benchmark gauge: Comparison of Curtin’s market share against previous years reflects the growth/changes in demand for Curtin courses and the quality of its domestic undergraduate students.

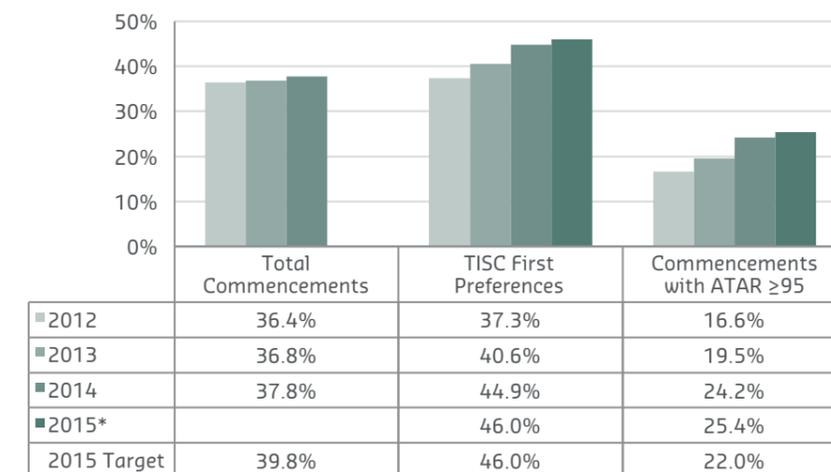
Total Commencements is the percentage of all commencing students (undergraduates, postgraduates and others) enrolled at one of the five universities in Western Australia as measured with data published by the Department of Education and Training (DET), Canberra.

TISC First Preferences measure Curtin market share in first preferences received through TISC. TISC is operated by the four major public universities in Western Australia to facilitate domestic undergraduate applications. The University of Notre Dame (UND) is a private institution; it does not utilise TISC and accepts direct entry for all student applications.

Commencements with ATAR ≥95 is the percentage of TISC and non-TISC (UND) applicants with a high ATAR score (≥95) that enrolled at one of the five major universities in Western Australia. An imputed enrolment is calculated for the University of Notre Dame based on the TISC application data.

Market share across all three measures for the latest year has improved compared to prior years. Targets have been met for both TISC first preferences and commencements with ATAR ≥95. However, data are not yet available for 2015 Total Commencements.

Curtin Market Share of WA University Students



*Benchmark data for 2015 are not available for Total Commencements due to timing of data collection and release by DET.

Teaching and Research (continued)

Outcome Component: 2. Student Experience

As a destination of choice for students, Curtin will offer an educational experience that is richly interactive, engaging and fully prepares students for the complex environments they will live and work in.

Student satisfaction with courses provides insight into the quality of the student experience. Minimising the attrition of students, as measured through student retention, allows the University to optimise its student load and revenue base and ensures students can fulfil their ambitions to obtain a University qualification.

Key Performance Indicator: 2.1 Overall course satisfaction (CEQ)

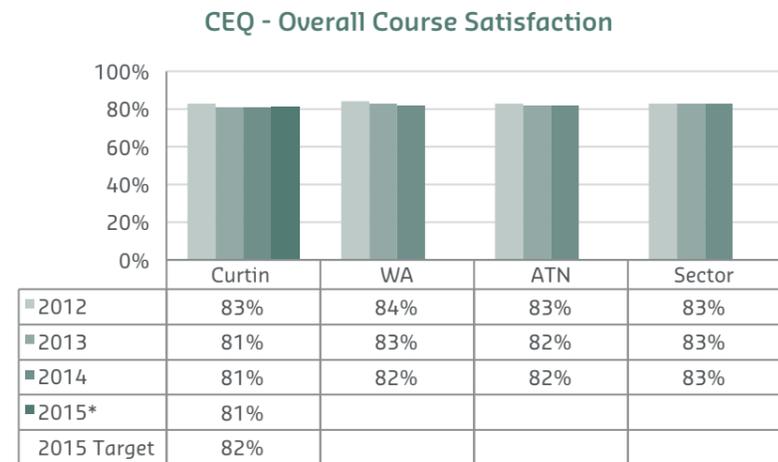
This is a new key performance indicator for 2015.

Classification: Effectiveness measure

Benchmark gauge: Course Experience Questionnaire (CEQ) data on WA universities, Australian Technology Network (ATN) universities and the Higher Education sector from the Australian Graduate Survey sourced from Graduate Careers Australia (GCA).

The CEQ collects information on graduates' opinions (both undergraduate and postgraduate coursework) of their course approximately four months after course completion. Overall satisfaction is derived from a single item "Overall, I was satisfied with the quality of this course". Percentage agreement (%) reflects the proportion of "Agree" or "Strongly Agree" responses.

The 2015 score of 81 per cent is marginally below target. Benchmark data for 2015 are not yet published.



Note: The year refers to the survey year and is relevant to graduates from the prior year. In 2015 the number of survey responses was 4,095, the population size was 7,939, and the response rate was 51.6 per cent. The margin of error was 0.84 at a 95% confidence level. *Benchmark data for 2015 are not available due to timing of data collection and release by GCA. Curtin 2015 figure is derived from available survey data.

Teaching and Research (continued)

Key Performance Indicators: 2.2 Retention of undergraduate students

This key performance indicator now only measures all undergraduate students retained at Curtin as reporting of commencing undergraduate student retention is no longer undertaken.

Classification: Efficiency measure

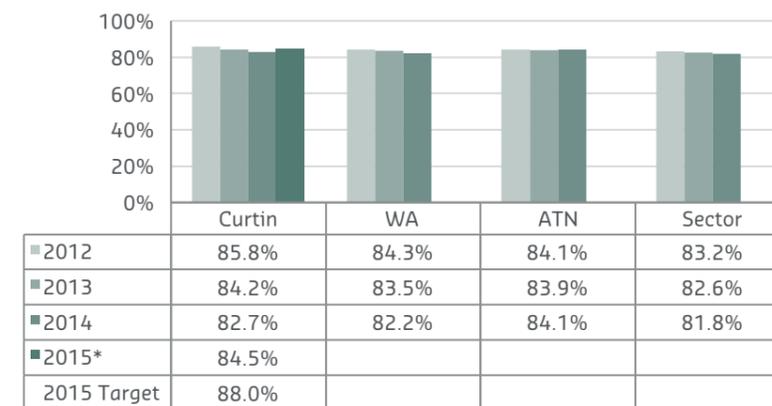
Benchmark gauge: WA universities and Higher Education sector retention rates sourced from DET.

Resources devoted to teaching students during a year are more efficiently expended if students return to their studies in the following year.

Retention rates are affected by a multitude of factors including a student's personal circumstances. Targets for retention rates are set to be equal or above the WA universities and Higher Education sector averages to ensure Curtin's performance remains at an acceptable level.

Retention of 84.5 per cent of undergraduate students in 2015 shows a significant improvement against Curtin and benchmark rates of the prior year. A task force has been working on a series of initiatives to enhance student retention rates.

Retention Rate - All UG Students



Note: In previous reports 2012-2014 Curtin data were derived from internal systems. In this report 2012-2014 Curtin data are now derived from the same source as the benchmarks i.e. Department of Education and Training. *Benchmark data for 2015 are not available due to timing of data collection and release by DET. Curtin 2015 retention rate is derived using internal systems.

Teaching and Research (continued)

Outcome Component: 3. Research Reputation and Outcomes

To be a leading international university Curtin must have strong research performance.

The prestige of being ranked within the Academic Ranking of World Universities (ARWU) and Excellence in Research Australia (ERA) provides significant research, partnership and marketing opportunities. The measures reflect credible, external evaluations. Research income is an indicator of the University's ability to attract research funding in a competitive environment and provides a proxy measure for national and international research reputation.

Key Performance Indicator: 3.1 The Academic Ranking of World Universities (ARWU) ranking

This is a new key performance indicator for 2015.

Classification: Effectiveness measure

Benchmark gauge: ARWU ranking data by Centre for World-Class Universities of Shanghai Jiao Tong University. Rise in rank indicates the progress of Curtin in attaining leadership in research and education.

The ARWU uses six objective indicators to rank world universities, including the number of alumni and staff winning Nobel Prizes and Fields Medals, the number of highly cited researchers selected by Thomson Reuters, the number of papers published in *Nature* and *Science* journals, the number of papers indexed in Science Citation Index-Expanded and Social Science Citation Index, and the per capita academic performance of an institution. More than 1,200 universities are ranked by ARWU and the best 500 are published on the web.

Curtin was estimated to rank 270 in the world in 2015. This is a significant rise in position. Among Australian universities, it has retained its position in the 9-11 grouping.

ARWU Ranking

	2012	2013	2014	2015	2015 Target
World Rank	401-500	401-500	301-400	201-300	301-400
Estimated World Rank	431=	427=	303=	270	
National Rank	17-19	17-19	10-18	9-11	10-16
Estimated National Rank	17	17=	10=	11	

Note: 2012-2015 estimated ranks are calculated by Curtin's Office of Strategy and Planning using publicly available scores and a factored calculation.

Teaching and Research (continued)

Key Performance Indicator: 3.2 Excellence in Research for Australia (ERA) results

This is a new key performance indicator for 2015.

Classification: Effectiveness measure

Benchmark gauge: ERA rating by the Australian Research Council (ARC). Comparison with previous years' ratings reflects progress and development of research at Curtin.

ERA is Australia's national research evaluation framework. It provides a comprehensive quality evaluation of all research produced in Australian universities against national and international benchmarks. ERA is based on expert review informed by a range of indicators and metrics with ratings assigned using Field of Research (FoR) codes within an institution based on the Australia and New Zealand Standard Classification. Data for ERA is submitted at the four-digit FoR level which categorises a broad subject area or research discipline at a more detailed level.

In 2015, Curtin was assessed on 50 four-digit level FoRs and awarded '5s' (well-above world-standard) for 9 fields and '4s' (above world standard) for 17 fields, the top two of a five-point rating scale. Curtin has met and exceeded its set targets for ERA outcomes.

ERA Results

	2010	2012	2015	2015 Target
5s	2	2	9	4
4s	5	12	17	16

Note: The ERA process is conducted every 3 years. A pilot round was held in 2010.

Key Performance Indicator: 3.3 Total research income (HERDC Cat 1-4)

Classification: Effectiveness measure

Benchmark gauge: Australian Technology Network (ATN) Universities and All Australian Universities National Rank sourced from DET higher education research data collection (HERDC) data.

Research income consists of four HERDC categories:

- Category 1 - Australian Competitive Grants
- Category 2 - Other Public Sector Funds
- Category 3 - Industry and Other Funds
- Category 4 - Cooperative Research Centre Funds

Curtin has set a target to increase research income by 100 per cent over 2013-2017 in order to secure its position as a top 10 university in Australia.

Research performance outcomes are being targeted through strategic support for grant proposals, recruitment of high performing researchers, and improved success in ARC fellowship and grant programs. These strategies are delivering improved research income performance.

As the DET data are reported with a year lag, benchmark data are only available up to 2014. In that year, Curtin's research income was above the average ATN universities and ranked 12th among 41 Australian universities.

Total Research Income (HERDC Cat 1-4)

	2012	2013	2014	2014 Target	2015 target
Curtin	\$63.4m	\$72.4m	\$80.5m	\$72.0m	\$83.0m
Average ATN Universities*	\$59.6m	\$65.2m	\$70.5m		
All Australian Universities Rank*	13	12	12		

*Data for 2015 are not available due to timing of data collection and release by DET.

B. PEOPLE AND CULTURE

Outcome Component: 4. Performance

To improve student experience and Curtin’s research performance, the University is focused on improving the performance of its academic workforce. Academic staff qualifications are a significant lead indicator of Curtin’s capacity to achieve its strategic goals in teaching and research.

To be a leading international university Curtin must have strong research cohort. The University’s ability to attract research funding in a competitive environment and performance of the research cohort is measured by research income per research (full time equivalent) FTE.

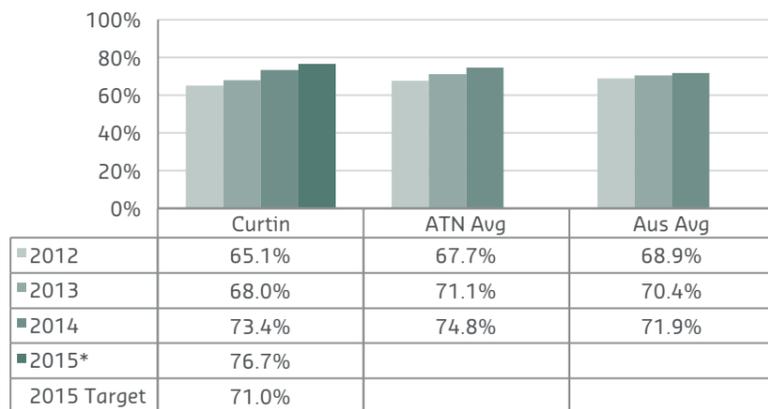
Key Performance Indicator: 4.1 Academic staff with doctoral qualifications

Classification: Effectiveness measure

Benchmark gauge: ATN and Australian sector averages are calculated based on universities that participate in the HR Benchmarking Program compiled by the Australian Higher Education Industrial Association (AHEIA).

Curtin’s percentage of academic staff with doctoral qualifications of 76.7 per cent in 2015 has exceeded target. Benchmark data for 2015 are not published yet.

Academic Staff with Doctoral Qualifications



*Benchmark data for 2015 are not available due to timing of data collection and release by AHEIA. Curtin 2015 percentage is derived using internal systems. Note: Data for Curtin and benchmarks are sourced from the latest report provided by AHEIA. Some figures may differ from those reported previously as data are recalculated by AHEIA each year.

Key Performance Indicator: 4.2 Research income per research staff FTE

Classification: Efficiency measure

Benchmark gauge: ATN and Australian universities figures derived from DET HERDC publication.

Increased productivity is being addressed through targeting of higher value research grants and contracts, and timely contract management through the Office of Research and Development.

Research Income comprises HERDC income (categories 1-4) and the research cohort consists of FTE staff who perform the functions of “research” or “teaching and research”, in academic or professional roles.

In 2014, there was a 12 per cent increase in research income per research FTE and the target is met.

People and Culture (continued)

Research Income (HERDC Cat 1-4) per Research Staff FTE

	2012	2013	2014	2014 Target	2015 Target
Curtin	\$57,725	\$63,860	\$71,328	\$69,695	\$80,150
Average ATN Universities*	\$52,470	\$56,460	\$61,269		
National Rank*	16	16	13		

*Data for 2015 are not available due to timing of research income data and staff data collections and release by DET. Note: All figures differ from those reported in previous years as Research Staff FTE data previously sourced from the Research Performance Index has now been replaced by data from Department of Education and Training.

Outcome Component: 5. Satisfaction

Curtin has adopted a staff satisfaction target that takes it towards being recognised as an employer of choice. The University actively seeks feedback from staff through the *YourVoice* Staff Satisfaction Survey.

Key Performance Indicator: 5.1 Overall staff satisfaction (*YourVoice* survey)

This is a new key performance indicator for 2015

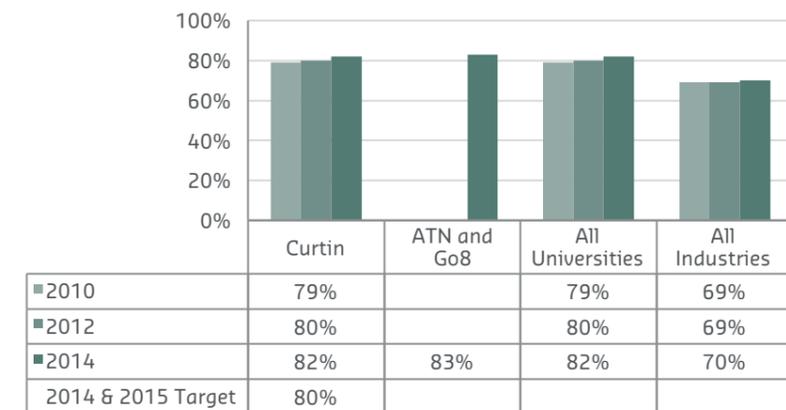
Classification: Effectiveness measure

Benchmark gauge: “ATN and Group of Eight (Go8); “All Universities” and “All Industries” data compiled by the Voice Project Agency that conducted this survey for Curtin. The Go8 is an alliance of eight research-intensive Australian universities.

The *YourVoice* survey is conducted on a biennial basis and the indicator is derived from the mean of responses to three statements: “My work gives me a feeling of personal accomplishment”; “I like the kind of work I do” and “Overall, I am satisfied with my job”.

The latest available result is from the 2014 survey and the satisfaction outcome of 82 per cent exceeded target and also met/exceeded two out of three benchmark results.

Your Voice - Job Satisfaction (% Fav)



Note: Data for ATN and Go8 is a new comparison category from 2014. In 2014 the number of survey responses was 2,920 the population size was 4,357 and the response rate was 67 per cent. The margin of error was 1.0 at a 95% confidence level. In 2010 and 2012 only continuing and fixed-term staff were surveyed. In 2014 professional casual staff and academic sessional staff were also included in the survey.

People and Culture (continued)

Outcome Component: 6. Diversity and Equity

Increased participation of indigenous people in the workforce is a key objective of the University and aligns to the Curtin Reconciliation and Action Plan. Increased participation of female staff in the workforce is part of the University's Equal Employment Opportunity Management Plan.

Key Performance Indicator: 6.1 Indigenous staff participation rate

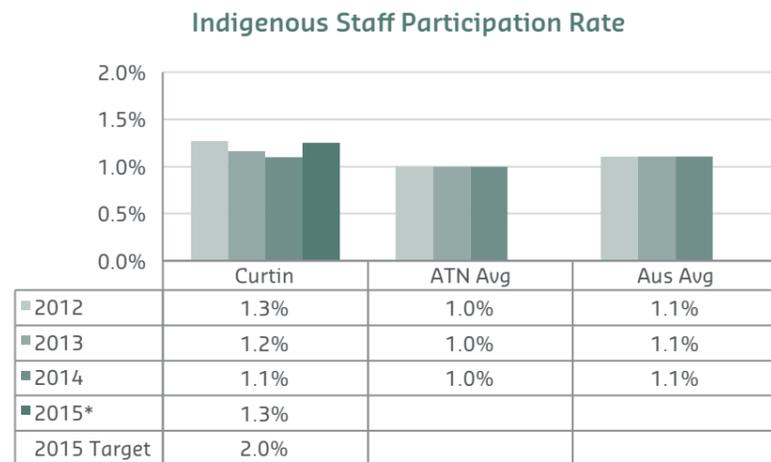
This is a new key performance indicator for 2015.

Classification: Effectiveness measure

Benchmark gauge: ATN and Australian averages published by the Australian Higher Education Industrial Association.

The Indigenous participation rate is the proportion of all staff, both academic and general, who are in continuing and fixed-term employment and who have identified as Indigenous (of Aboriginal and/or Torres Strait Islander descent).

Although the 1.3 per cent achieved in 2015 is an improvement on the previous year's results for Curtin and against benchmarks, the target was not met.



*Benchmark data for 2015 are not available due to timing of data collection and release by AHEIA. Curtin 2015 percentage is derived using internal systems.

People and Culture (continued)

Key Performance Indicator: 6.2 Staff gender balance

This is a new key performance indicator for 2015.

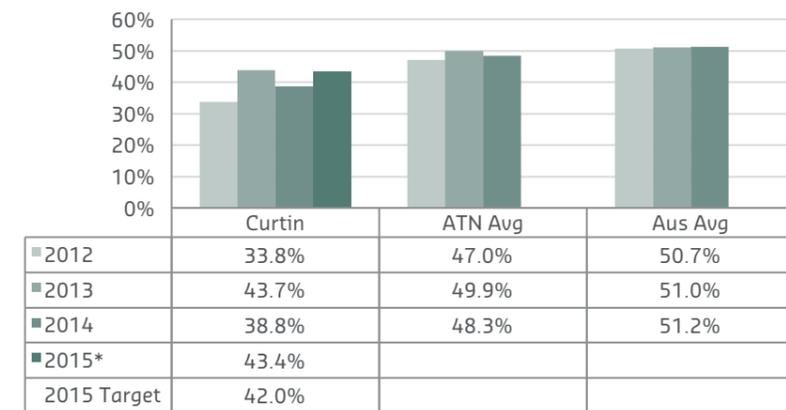
Classification: Effectiveness measure

Benchmark gauge: ATN and Australian averages published by the Australian Higher Education Industrial Association.

Staff gender balance is measured by the proportion of full-time equivalent (FTE) female staff in senior positions, those who are in professional "Higher Education Worker (HEW) level ≥10" and "Academic Level E (ALE)" positions.

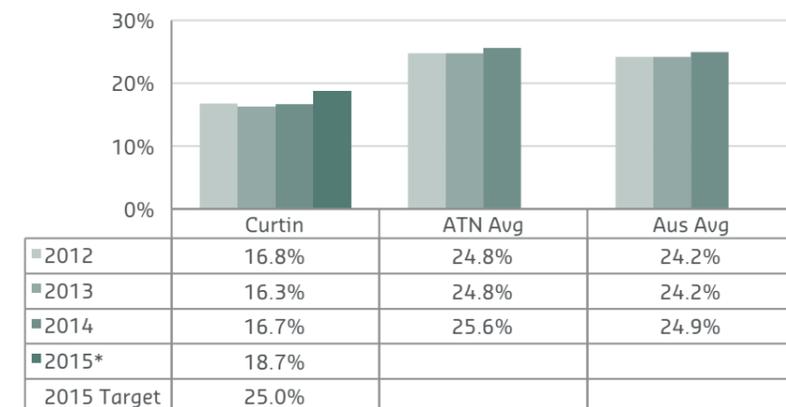
Curtin outcomes in 2015 for both categories of female staff have improved significantly when compared to the previous year, although the target was not met for females in Academic ALE positions.

Females in Professional HEW ≥10 Positions



*Benchmark data for 2015 are not available due to timing of data collection and release by AHEIA. Curtin 2015 percentage is derived using internal systems.

Females in Academic ALE Positions



*Benchmark data for 2015 are not available due to timing of data collection and release by AHEIA. Curtin 2015 percentage is derived using internal systems.

C. ENGAGEMENT AND IMPACT

Outcome Component: 7. Graduate Reputation

Curtin aspires to have the highest graduate employment rates in Western Australia. The vision for Teaching and Learning is to be 'sought after by students' and 'sought after by employers'. Measuring the employment rate of graduates indicates the reputation of Curtin graduates with industry as well as a secondary measure of Curtin's reputation. It should be noted that graduate employment rates are affected by external factors such as economic conditions and labour market cycles.

Key Performance Indicator: 7.1 Domestic graduate employment rates

Classification: Effectiveness measure

Benchmark gauge: National Graduate Destination Survey Ranking (institutions with >300 survey respondents) published by Graduate Careers Australia.

The Graduate Destination Survey (GDS) is a component of the annual Australian Graduate Survey (AGS) that measures the employment rates of graduates following the completion of their degree. The measure used is based on those who are available for paid work, i.e. includes those in full-time and part-time work, and excludes those unavailable for work.

Curtin's domestic graduate employment rate of 89.3 per cent in 2015 represents a 0.5 per cent improvement from 2014. However, this is below the national employment rate of the prior year and Curtin's rank within Western Australia in 2014 has slipped to 3rd and national rank declined to 30th.

Domestic Graduate Employment Rates

	2012	2013	2014	2015	2014 & 2015 Target
Curtin employment rate	93.5%	91.8%	88.8%	89.3%	
National employment rate*	92.2%	90.6%	90.2%		
Western Australian Ranking*	2 (n=5)	2= (n=5)	3 (n=5)		1
National Ranking*	14 (n=41)	13 (n=42)	30 (n=42)		

Note: The year refers to the survey year and is relevant to graduates from the prior year. In 2015 the number of survey responses was 3251, the population size was 5831, and the response rate was 55.8 per cent. The margin of error was 0.71 at a 95% confidence level.

**Benchmark data for 2015 are not available due to timing of data collection and release by GCA. Curtin 2015 figure is derived from available survey data.*

Outcome Component: 8. Alumni Engagement

Maintaining relationships with alumni supports advocacy for the University and ensures global alumni networks are fostered. The annual Alumni survey measures the affinity of alumni towards Curtin using a Net Promoter Score (NPS).

Key Performance Indicator: 8.1 Alumni survey

This is a new key performance indicator for 2015.

Classification: Effectiveness measure

Benchmark gauge: Since this is an internal survey, there is no comparable benchmark.

As part of the annual Curtin Alumni Survey alumni are asked to rate the question "How likely would you be to recommend Curtin as a university to your family, colleagues or friends?" on a 0-10 likelihood scale. Responses are grouped according to their score on a scale of 0-10: *Promoters* (9-10); *Passives* (7-8); and *Detractors* (0-6). The NPS is then derived by taking the percentage of *Detractors* from the percentage of *Promoters*.

NPS of 48 in 2015 shows a noticeable increase compared to previous years and has exceeded target.

Engagement and Impact (continued)

Net Promoter Score (NPS) of the Curtin Alumni Survey Results

	2013			2014			2015		
	n	Positive (7-10)*	NPS	n	Positive (7-10)*	NPS	n	Positive (7-10)*	NPS
Actual	906	85%	28	1,164	92%	42	2,820	91%	48
Target						28			29

*Note: In 2015, the number of responses was 2,820, the population size was 84,956**, and the response rate was 3.3 per cent. The margin of error was 1.04 at a 95% confidence level.*

**Proportion of respondents who gave the question a rating of 7, 8, 9 or 10.*

***The population only includes Alumni for which Curtin has current contact details. A significant proportion of alumni who graduated prior to 2000 are not included in the population as Curtin does not have current email addresses for these graduates.*

Outcome Component: 9. International Reputation

Curtin aims to grow its reputation for quality research and graduates. Improving academic and employer survey scores in comparison to other Australian universities will demonstrate the University's increased performance in the higher education and industry sectors.

Key Performance Indicator: 9.1 QSWUR Global Academic Survey and Global Employer Survey scores

This is a new key performance indicator for 2015.

Classification: Effectiveness measure

Benchmark gauge: Comparison with all Australian universities in the QSWUR survey ranks.

The QS World University Ranking (QSWUR) uses responses from two global surveys as part of their ranking metrics. The Global Academic Survey is the basis for the Academic Reputation indicator, worth 40% of an institution's total score and the Global Employer Survey is the basis for the Employer Reputation indicator, worth 10% of an institution's total score.

In 2015, Curtin ranks 15th among Australian universities in the Academic Survey and has met target. For the Employer Survey, Curtin's 17th position is one below target. A total of 33 Australian universities were ranked in QSWUR in 2015.

Curtin Rank in Australia in the QSWUR Global Academic Survey and Global Employer Survey Scores

	2013	2014	2015	2015 Target
Academic	14	16	15	15
Employer	14	17	17	16

Note: Ranking data is not available for 2012.

D. FINANCIAL SECURITY

Outcome Component: 10. Financial Sustainability

To provide an excellent learning experience that is financially sustainable.

Key Performance Indicator: 10.1 Teaching and learning (T&L) expenditure per equivalent full-time student load (EFTSL)

Classification: Efficiency measure

Benchmark gauge: This indicator is an internal measure and there is no comparable data for benchmarking.

Due to the changing nature of business models for the delivery of T&L, e.g. development of Massive Open Online Courses (MOOCs) and other online offerings, a target for this measure has not been set.

T&L expenditure relates to the teaching of Curtin's programs. Utilising the measures of average cost of teaching each EFTSL provides an insight into the efficiency with which monies directed towards the T&L objective have been spent.

It is important to note that average expenditure per EFTSL is largely dependent on the mix of disciplines taught by an institution. Curtin's high representation of laboratory-based courses raises service delivery costs when compared to institutions where non-laboratory-based courses feature more prominently. Also, Curtin incurs higher than average costs in supporting the delivery of regional higher education programs through its presence in Kalgoorlie and Margaret River.

Teaching and Learning Expenditure per Student EFTSL

	2012	2013	2014	2015
T&L Expenditure (\$'000)	\$568,841	\$605,914	\$627,778	\$639,978
EFTSL	38,650	38,056	38,525	38,506
T&L Expenditure per EFTSL	\$14,718	\$15,922	\$16,295	\$16,620

Key Performance Indicator: 10.2 Net operating results

Classification: Effectiveness measure

Benchmark gauge: This indicator is an internal measure and there is no comparable data for benchmarking. No targets have been published due to the commercially sensitive nature of this measure.

Net Operating results (revenue minus expenses from continuing operations) provide further information on Curtin's financial sustainability. The University aims to maintain a surplus net operating result and a positive percentage of total revenue from continuing operations. This allows funds to be reinvested into operations to ensure core activities are optimised.

Net Operating Results (dollars and percentage of total revenue)

	2012	2013	2014	2015
Net Operating Result (\$'m)	\$80.4	\$62.4	\$49.7	\$62.0
Percentage of total revenue from continuing operations	10.1%	7.3%	5.6%	6.8%