

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 2016.



Colin Beckett
Chancellor



Deborah Terry AO
Vice-Chancellor

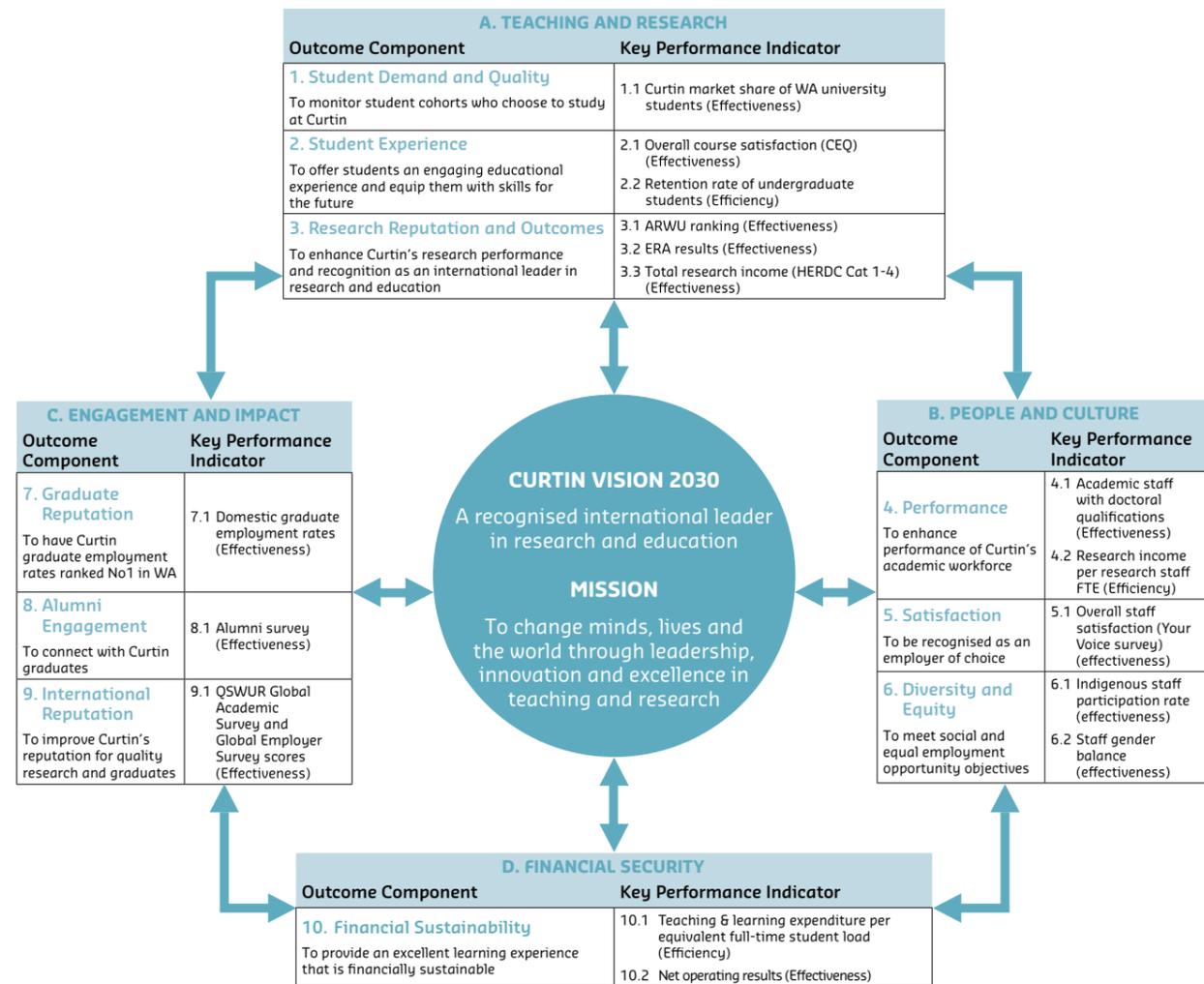
On behalf of the University Council

Dated this 22nd day of March 2017

CURTIN ANNUAL REPORT 2016 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 performance across a series of outcome components and key performance indicators related to: 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. 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

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.

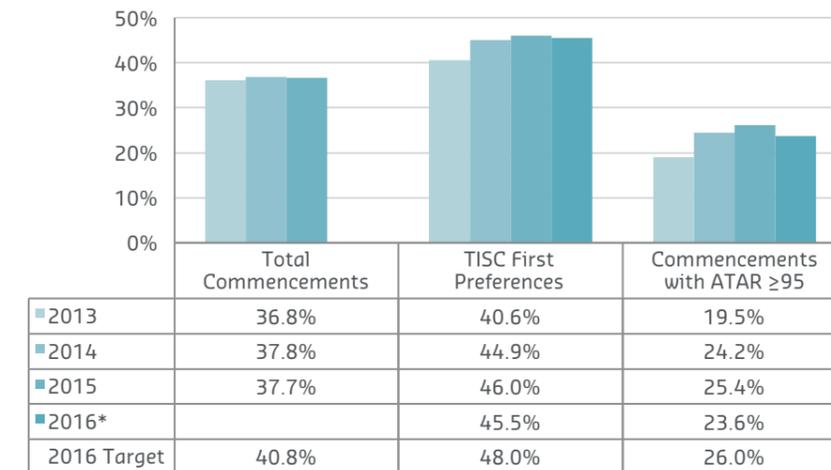
Total Commencements is the per cent of all commencing students (undergraduates, postgraduates and others) enrolled at one of the five universities in Western Australia as measured with data published by the Department of Education and Training (DET), Canberra.

TISC First Preferences measure Curtin market share in first preferences received through the 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 and hence does not utilise TISC but considers direct entry for all student applications.

Commencements with ATAR ≥95 is the per cent 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.

Performance in 2016 has fallen short of target and 2015 performance. Curtin has been approaching market share saturation and growth in market share is showing signs of slowing. Initiatives launched in 2016, such as the Curtin Medical School, are expected to enhance market share outcomes. Data for 2016 Total Commencements is not yet available.

Curtin Market Share of WA University Students



*Benchmark data for 2016 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 is committed to offering 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)

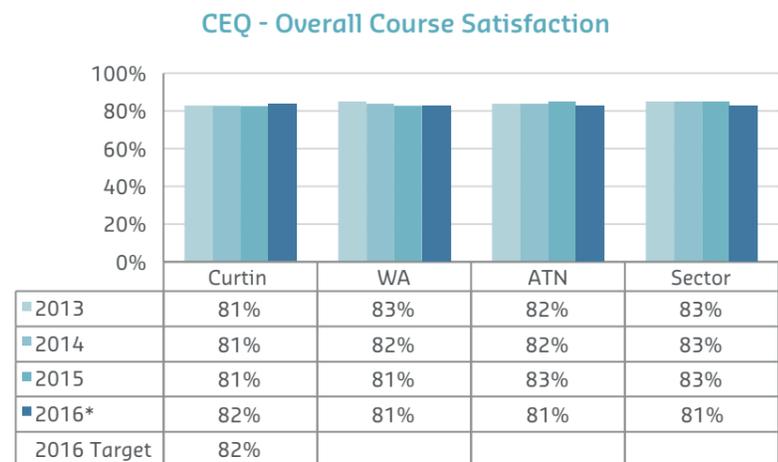
Classification: Effectiveness measure

Benchmark gauge: Course Experience Questionnaire (CEQ) data on WA universities, Australian Technology Network (ATN) universities and the Higher Education sector.

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". Per cent agreement (%) reflects the proportion of "Agree" or "Strongly Agree" responses.

The 2016 CEQ measure is sourced from the 2016 Graduate Outcomes Survey (GOS), a national survey funded by the Australian Government Department of Education and Training (DET) and replaces its forerunner - the Australian Graduate Survey (AGS). The GOS is administered centrally by the Social Research Centre, and data is collected entirely online. While the CEQ questions have remained the same between the GOS and the AGS, the rest of the general survey instrument and data collection method is markedly different, thus 2016 results are not directly comparable to 2013-2015 results. Further information is available from education.gov.au/upholding-quality-quality-indicators-learning-and-teaching.

The 2016 score of 82 per cent matches the target set and is above sector.



Note: 2013-2015 results derived from the Australian Graduate Survey data (which includes the CEQ); representing the views of those who completed their course between 2012 and 2014. This data was sourced from Graduate Careers Australia. 2016* results are derived from the Graduate Outcome Survey (GOS) data (which includes the CEQ); representing the views of those who completed their course in 2015. Due to changes in the survey instrument and data collection method, 2016 results are not directly comparable to historical figures. In 2016 the number of Curtin survey respondents was 3,414, the population size was 8,462, and the response rate was 40.3 per cent. The margin of error was 1.3 at a 95% confidence level.

Teaching and Research (continued)

Key Performance Indicator: 2.2 Retention of undergraduate students

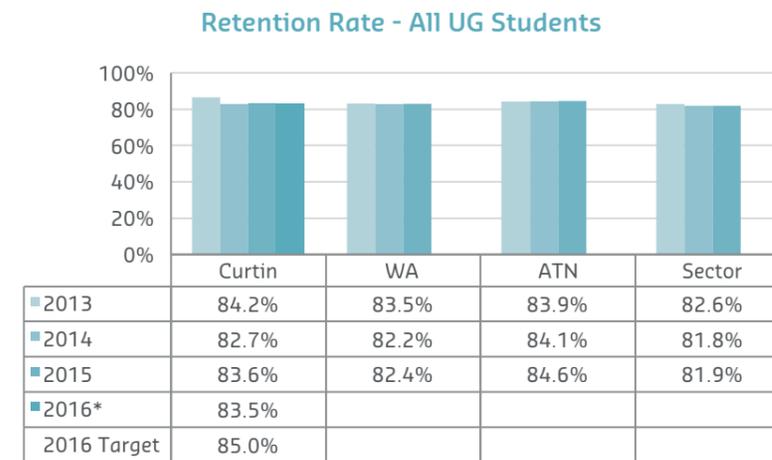
Classification: Efficiency measure

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 rate of undergraduate students in 2016 is below the University's target but ahead of WA and sector for historic years. Initiatives to address retention rate issues are in place and are expected to influence performance over the coming years.



*Benchmark data for 2016 are not available due to timing of data collection and release by DET. Curtin 2016 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

Classification: Effectiveness measure

Benchmark gauge: ARWU ranking data by Centre for World-Class Universities of Shanghai Ranking Consultancy. 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 is estimated to rank 211 in the world in 2016, a very significant improvement in rank. Among the Australian universities, it has obtained a position in the top 10 nationally.

ARWU Ranking

	2013	2014	2015	2016	2016 Target
World Rank	401-500	301-400	201-300	201-300	250-280
Estimated World Rank	427=	303=	270	211	
National Rank	17-19	10-18	9-11	9-14	10-16
Estimated National Rank	17=	10=	11	10	

Note: 2013-2016 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

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.

There is no ERA rating in 2016, the next round will be conducted in 2018. 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 met and exceeded its set targets for 2015 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 is only available up to 2015. In that year, Curtin's research income was above the average ATN universities and continued to rank 12th among 41 Australian universities.

Total Research Income (HERDC Cat 1-4)

	2013	2014	2015	2015 Target	2016 target
Curtin*	\$72.4m	\$80.5m	\$87.5m	\$83.0m	\$90.0m
Average ATN Universities*	\$65.2m	\$70.5m	\$73.1m		
All Australian Universities Rank*	12	12	12		

**Data for 2016 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).

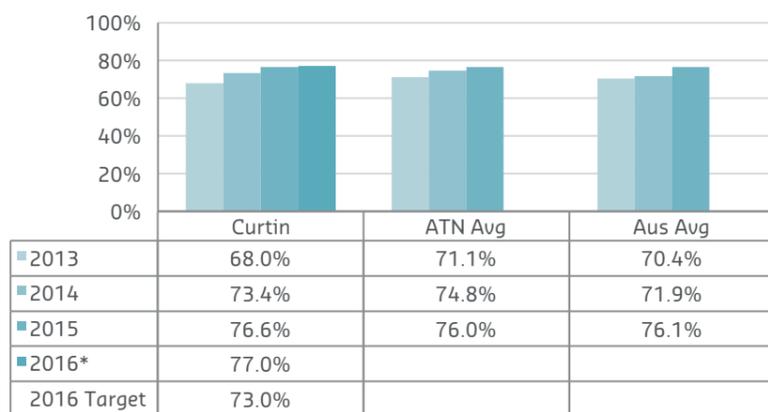
Key Performance Indicator: 4.1 Academic staff with doctoral qualifications

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 in 2016 of 77.0% has exceeded target and benchmark figures for prior year. Benchmark data for 2016 are not published yet.

Academic Staff with Doctoral Qualifications



*Benchmark data for 2016 are not available due to timing of data collection and release by AHEIA. Curtin 2016 percentage is derived using internal systems.
Note: Data for Curtin and benchmarks are sourced from the latest report provided by AHEIA

People and Culture (continued)

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 staff FTE who perform the functions of “research” or “teaching and research,” in academic or professional roles. In 2015, there has been a 19 per cent growth in research income per research FTE and the target is met. Curtin is ahead of the ATN average and its national rank has improved.

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

	2013	2014	2015	2015 Target	2016 Target
Curtin*	\$63,860	\$71,328	\$84,592	\$80,150	\$93,775
Average ATN Universities*	\$56,460	\$61,269	\$63,182		
National Rank*	16	13	11		

*Data for 2016 are not available due to timing of research income data and staff data collections and release by DET.

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)

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 biennially 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”.

2016 results are not available as there was no survey conducted in 2016. However the survey has been scheduled to March 2017 so as to ensure that the results can be fully disseminated and acted upon within the calendar year; also the March date will provide sufficient time to facilitate the involvement of staff at Curtin’s offshore campuses. Results for this measure will be reported to University Council in 2017.

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)

	2010	2012	2014	2016	2016 Target
Curtin	79%	80%	82%	na	80%
ATN and Go8*	na	na	83%	na	
All Universities	79%	80%	82%	na	
All Industry	69%	69%	70%	na	

*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.

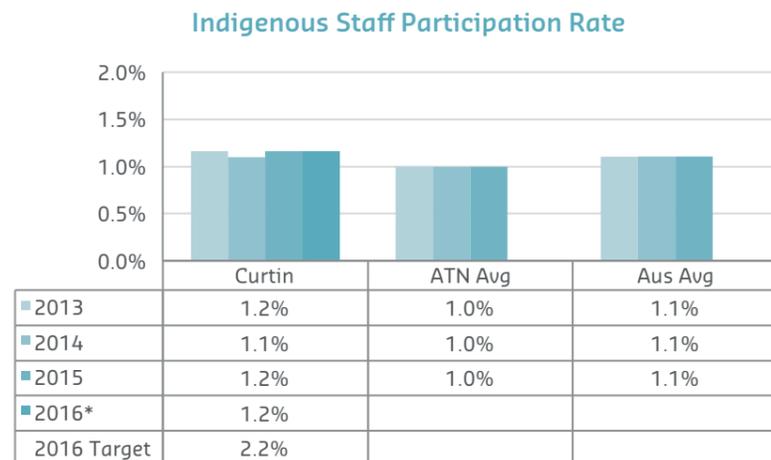
Key Performance Indicator: 6.1 Indigenous staff participation rate

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).

Indigenous participation rate of 1.2 per cent in 2016 did not meet target but it is slightly higher than benchmarks of prior year. Work will continue during 2017 to enhance the performance on this measure. Enhancing Indigenous staff participation continues to be an important and longer term goal of the University.



*Benchmark data for 2016 are not available due to timing of data collection and release by AHEIA. Curtin 2016 percentage is derived using internal systems.

People and Culture (continued)

Key Performance Indicator: 6.2 Staff gender balance

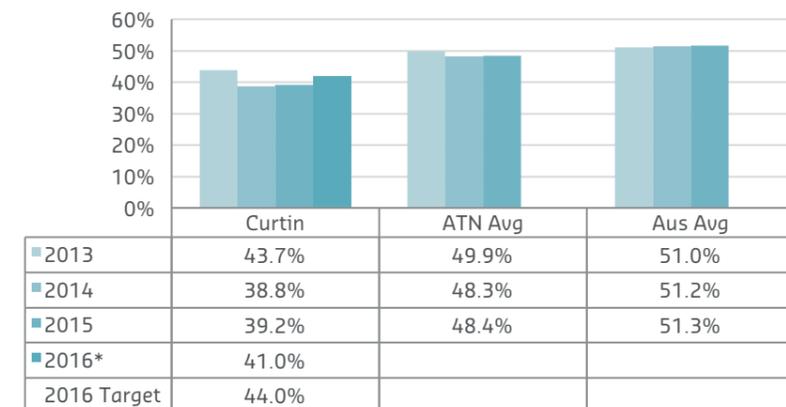
Classification: Effectiveness measure

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.

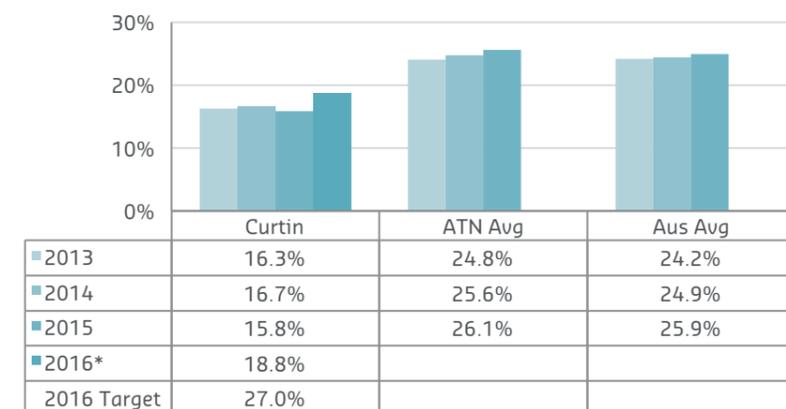
Curtin’s outcomes in 2016 for both categories of female staff have improved when compared to the previous year, however are below the University target and below the benchmarks of ATN and all Australian universities. Strategies in place are showing positive results in 2016. These strategies will guide Curtin in achieving its longer term target of 44.0% in the future.

Females in Professional HEW ≥10 Positions



*Benchmark data for 2016 are not available due to timing of data collection and release by AHEIA. Curtin 2016 percentage is derived using internal systems.

Females in Academic ALE Positions



*Benchmark data for 2016 are not available due to timing of data collection and release by AHEIA. Curtin 2016 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.

As with the CEQ measure, the 2016 employment rate is sourced from the Graduate Outcomes Survey (GOS), while the 2013-2015 results has been sourced from the Australian Graduate Survey (AGS). Although the GOS and its forerunner the AGS both collect labour market outcome information, the data collection method and labour market questions are different. Consequently, 2016 forms a new time series and is not directly comparable to 2013-2015 results. Further information is available from education.gov.au/upholding-quality-quality-indicators-learning-and-teaching.

Results show that Curtin's domestic graduate employment rate, including casual employment, is 88.6 per cent in 2016. Curtin ranks 3rd within Western Australia and 23rd nationally.

Domestic Graduate Employment Rates

	2013	2014	2015	2016*	2016 Target
Curtin Employment Rate	91.8%	88.80%	89.3%	88.6%	
National Employment Rate	90.6%	90.2%	90.3%	88.7%	
Western Australian Ranking	2=	3	4	3	2
National Ranking	13 (n=42)	30 (n=42)	33 (n=39)	23 (n=38)	

Note: 2013-2015 results derived from Graduate Destinations Survey (GDS 2013-15) data; representing the views of those who completed their course between 2012 and 2014.

** 2016 results are derived from Graduate Outcome Survey (GOS 2016) data; representing the views of those who completed their course in 2015.*

Due to changes in the survey instrument and data collection method, 2016 results are not directly comparable to historical figures.

In 2016, the number of domestic Curtin survey respondents was 2,977, the domestic Curtin graduate population size was 6,433, and the response rate was 46.3 per cent. The margin of error was 1.32 at a 95% confidence level.

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

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.

2016 results are not available. Work is currently underway to develop a more robust Alumni engagement measure for the Strategic Plan 2017-2020. For this reason, a decision was made not to undertake the 2016 Alumni Survey.

In 2015, NPS of 48 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			2016		
	n	Positive (7-10)*	NPS	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	na	na	na
Target						28			29			na

*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

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 2016, Curtin ranks 17th among Australian universities in the Academic Survey and has failed to meet target. For the Global Employer Survey, Curtin's 16th position is one below target. A total of 35 Australian universities were ranked in QSWUR in 2016.

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

	2013	2014	2015	2016	2016 Target
Academic	14	16	15	17	14
Employer	14	17	17	16	15

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 course delivery, 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 measure of average cost of teaching per EFTSL provides an indicator of efficiency. 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 relative service delivery costs, as does the delivery of regional higher education programs in locations such as Kalgoorlie and Margaret River.

Teaching and Learning Expenditure per Student EFTSL

	2013	2014	2015	2016
T&L Expenditure (\$'000)	\$605,914	\$627,778	\$639,978	\$633,110
EFTSL	38,056	38,525	38,506	37,537
T&L Expenditure per EFTSL	\$15,922	\$16,295	\$16,620	\$16,866

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 Result (revenue minus expenses from continuing operations) is the key measure of Curtin's financial sustainability. The University aims to maintain a net operating surplus in order to retain reserves for investment in development and to buffer against financial volatility.

Net Operating Results (dollars and percentage of total revenue)

	2013	2014	2015	2016
Net Operating Result (\$'m)	\$62.4	\$49.7	\$62.0	\$38.1
Percentage of total revenue from continuing operations	7.3%	5.6%	6.8%	4.2%