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CERTIFICATION OF PERFORMANCE INDICATORS

I 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 2006.



Mr Gordon Martin
Chancellor

Dated this 21st February 2007



Professor Jeanette Hackett
Vice-Chancellor

Dated this 21st February 2007

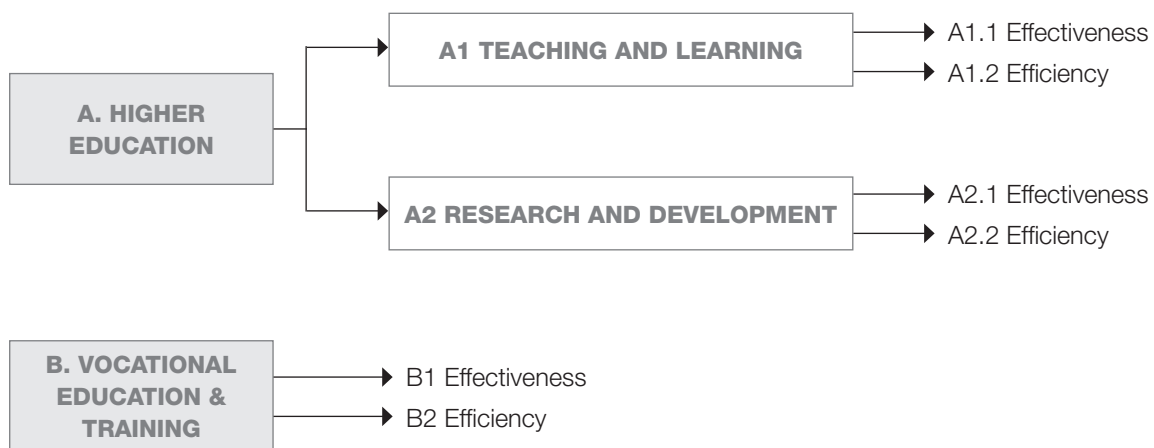
NB The Auditor-General's opinion can be seen on page 78

INTRODUCTION

Curtin’s efficiency and effectiveness Performance Indicators (PIs) demonstrate the University’s progress towards meeting its outcomes in Teaching and Learning and Research and Development. These focus primarily on the University’s higher education operations, found in Section A. Section B reports PIs for Curtin’s Kalgoorlie based vocational education and training programs (VET).

The PIs are analysed as measures of effectiveness and efficiency that reflect, in as much as possible, output performance in terms of Curtin’s Teaching and Learning and Research and Development objectives.

The following diagram summarises the approach,



and the following definitions are adopted:

- **Effectiveness measures the extent to which outcomes have been achieved**
- **Efficiency measures the resources used to attain a certain level of output.**

Trend data for the last three to four years are provided. These trend data are of particular use in indicating performance in cases where the indicators are prone to significant yearly changes attributable to small number distortion.

A1 TEACHING AND LEARNING (T&L)

	Ref	Name	Output/Objectives
A1.1 Effectiveness	a	Employment & Study Destinations of New First Degree Graduates	Graduate Quality
	b	Perceived Teaching Quality - Australian Graduate Survey	Teaching Quality
	c	Subject Load Pass Rate	Student Progress & Achievement
	d	Research Higher Degree Enrolments as a Percentage of Total Enrolments	Input
A1.2 Efficiency	e	Teaching and Learning Expenditure per EFTSL	T&L Expenditure
	f	Teaching and Learning Expenditure per Successful EFTSL	T&L Expenditure
	g	Graduate Productivity Rate	Student Progress & Achievement

A2 RESEARCH AND DEVELOPMENT (R&D)

	Ref	Name	Output/Objectives
A2.1 Effectiveness	h	Research Performance Index (RPI) Points by Range of Research Programs	RPI Output
	i	Institutional Grants Scheme (IGS): Comparison between Curtin and all Australian Universities	IGS Funding
	j	All Research Funding: Comparison between Curtin and the Averages for ATN Universities and National Ranking	Research Funding
	k	Cooperative Research Centre (CRC) Funding: Comparison between Curtin and all Australian Universities	Research Funding
	l	Number of Research Publications: Comparison between Curtin and the Averages for ATN and all Australian Universities	Research Publications
A2.2 Efficiency	m	Research Expenditure and RPI Points	Resource Use
	n	Research Performance Index Points per FTE Academic Staff	RPI Productivity
	o	Research Funding per 10 FTE Academic Staff: Comparison between Curtin and the Averages for ATN Universities and National Ranking	Comparative Research Funding
	p	Research Publications per 10 FTE Academic Staff: Comparison between Curtin and the Averages for ATN Universities and all Australian Universities	Research Publications

Performance Indicators

Section A – Higher Education

The University Mission is as follows:

Curtin is committed to innovation and excellence in teaching and research, for the benefit of our students and the wider community.

A1 TEACHING AND LEARNING

Curtin's Strategic Objective for Teaching and Learning is:

Excellent teaching that facilitates learning.

A1.1 EFFECTIVENESS INDICATORS

A1 TEACHING AND LEARNING (T&L)

	Ref	Name	Output/Objectives
A1.1 Effectiveness	a	Employment & Study Destinations of New First Degree Graduates	Graduate Quality
	b	Perceived Teaching Quality - Australian Graduate Survey	Teaching Quality
	c	Subject Load Pass Rate	Student Progress & Achievement
	d	Research Higher Degree Enrolments as a Percentage of Total Enrolments	Input

Quality of Graduates

(a) Employment and Study Destinations of New First Degree Graduates

This indicator measures Curtin's effectiveness in both assisting students to reach their full potential and in producing graduates who are of practical value to the community.

Table 1 (over) uses data from the Australian Graduate Survey (AGS), which combines the former Graduate Destination Survey (GDS) and Course Experience Questionnaire (CEQ), to summarise the major activities of new first degree (i.e. bachelor, bachelor honours, and diploma) Curtin graduates measured at 30 April in each year of

the series and compares these with the national average sourced from Graduate Careers Australia (GCA).

The percentage of graduates in their 'mode of choice', at 87%, meets the Curtin target of 82% and above. It also exceeds the benchmark of 82% that is the 2005 graduates' 'mode of choice' for all Australian universities. This benchmark is sourced from the latest GCA report 2005.

Table 1. Employment and Study Destinations of New First Degree Graduates¹ 2003 – 2006

Australian Citizens and Permanent Residents only

Activity	2003		2004		2005		2006	
	Curtin	All ²	Curtin	All ²	Curtin	All ²	Curtin	All ²
Full-Time Work	54%	53%	55%	53%	59%	55%	66%	n/a
Full-Time Study	22%	23%	21%	23%	20%	23%	13%	n/a
Not Working, Seeking FT Work	7%	5%	7%	5%	6%	5%	4%	n/a
PT Work, Seeking FT Work	8%	8%	8%	8%	6%	8%	7%	n/a
PT Work, Not Seeking FT Work	5%	6%	6%	6%	6%	6%	7%	n/a
Not Working, Seeking PT Work	1%	1%	1%	1%	1%	1%	0%	n/a
Unavailable for Work/Study	3%	4%	2%	4%	2%	3%	3%	n/a
Total	100%	100%	100%	100%	100%	100%	100%	n/a
% Graduates in Mode of Choice ³	79%	81%	79%	81%	84%	82%	87%	n/a
Curtin Target					= > 80%		= > 82%	
Benchmark (Australian Universities)					81%		82%	
<i>Total Number of Respondents</i>	2,337	65,158	2,044	64,965	2,059	65,738	2,010	n/a
<i>Response Rate</i>	71%	n/a	61%	n/a	57%	n/a	62%	n/a

Rounding errors may occur

1. Data are taken from the 2003-2005 Graduate Destination Survey and the 2006 Australian Graduate Survey conducted by the GCA of all graduates. In common with 90% of other institutions Curtin supplements GCA survey data (using internal student records) by including the number of graduates who go on to further study at Curtin.

2. All refers to All Australian universities.

3. Definition: The percentage of new first degree graduates working in the mode of their choice as a percentage of the total number of graduates seeking work.
Mode of Choice = (the number of graduates in full time work + number in part-time work, not seeing f/t work) / (total number of respondents minus those in full-time study and those unavailable for study or work).

Notes:

- GDS/AGS data are frequencies and not means thus standard deviations are not reported.
- Survey data for 2006: Confidence Level = 99%; Confidence Interval = 1.77.
- National data for 2006 are not yet available

Quality of Teaching

(b) Perceived Teaching Quality - Australian Graduate Survey (AGS)

The 23 item Australian Graduate Survey (AGS) provides outcome measures of teaching and learning. The AGS asks graduates to rate their perceptions using six aspects of their recently completed course: good teaching, clear goals and appropriate standards, appropriate assessment, appropriate workload, generic skills, and overall satisfaction. Graduates' perceptions of the extent to which they have developed 'Generic Skills',

together with their 'Overall Satisfaction', are fundamental to the University's pursuit of excellence in teaching and learning.

In the years 2003 to 2006, AGS data for all universities were analysed by the Australian Council for Educational Research on behalf of the GCA. Graduates assign

(cont'd over)

Performance Indicators

Section A – Higher Education

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(cont'd) scores across a range from –100 to +100 against each criterion. A score of -100 corresponds to *complete disagreement* with the criterion, while at the other extreme +100 would mean *complete agreement*. Results are shown in Table 2 (below).

The percentage of broadly satisfied Curtin graduates in 2006 averages 89%, slightly below the 90% average in 2005. It also falls below the Curtin target. The sub-category of 'Appropriate Workload' continues to show

improvement since 2003 although it is still below the national average. Other sub-categories remain steady.

The percentage also falls marginally below the benchmark of 90% that is the percentage of broadly satisfied graduates from all Australian universities in 2005. This benchmark is sourced from the latest GCA report (2005).

Table 2. Perceived Teaching Quality – Australian Graduate Survey (AGS) 2003 – 2006
Graduate assigned scores from –100 (complete disagreement) to +100 (complete agreement)

AGS Scale	2003		2004		2005		2006	
	Curtin	All ²	Curtin	All ²	Curtin	All ²	Curtin	All ²
Good Teaching	17	17	16	17	20 (42.1)	19	20 (39.1)	n/a
Clear Goals and Standards	19	17	17	16	20 (35.7)	17	19 (37.4)	n/a
Appropriate Assessment	21	24	20	23	21 (42.4)	23	20 (43.6)	n/a
Appropriate Workload	1	7	0	7	3 (37.0)	8	5 (35.4)	n/a
Generic Skills	39	36	37	36	37 (33.6)	37	36 (35.7)	n/a
Overall Satisfaction	36	38	34	38	37 (46.3)	39	37 (47.6)	n/a
Percent Broad Agreement ³ Overall Satisfaction	91%	90%	89%	89%	90%	90%	89%	n/a
Curtin Target					= > 90%		= > 90%	
Benchmark (Australian Universities)					89%		90%	
<i>Number of Respondents¹</i>	3,221	66,893	2,584	67,878	2,229	69,071	2,393	n/a
<i>Response Rate</i>	56%	n/a	41%	n/a	43%	n/a	50%	n/a

1. Since 1998, where a student has undertaken a double major they have been able to complete two Australian Graduate Surveys. Of the 2,393 Curtin respondents to the 2006 survey, 786 provided additional information about a second field of study.

2. All refers to All Australian universities.

3. Broad agreement includes responses of 3, 4 and 5 on a 5-point scale where 5 is strongly agree, so eliminating disagree and disagree strongly.

Notes:

- In the 2003 Annual Report a new method for calculating the response rate was used, resulting in a rate of 79%. This determination was subsequently reconsidered and a 56% response rate agreed for 2003, methodologically consistent with those for 2001 and 2002. The 2004, 2005 and 2006 rates, 41%, 43% and 50% respectively, follow the same approach, the fall reflecting both a decline in the number of responses and an increase in the number of CEQ/AGS forms sent out.
- Bracket figures are the standard deviation for each CEQ/AGS scale.
- Survey data for 2006: Confidence level = 99%; Confidence interval = 1.86.
- National data for 2006 are not yet available

Student Achievement and Progress

The indicator Subject Load Pass Rate measures quantity and timeliness. Sound curriculum design, good pedagogy, appropriate assessment practices and learning support should sustain pass rates while minimising completion times.

c) Subject Load Pass Rate (SLPR)

This indicator is the percentage of assessed subject load measured as Equivalent Full-Time Student Load (EFTSL) (previously Equivalent Full-Time Student Unit (EFTSU)) in each of the 2003 to 2006 academic years for which students were awarded a passing grade (Table 3). The SLPR has remained steady over the last four years but has fallen short of the Curtin target of above 88% in 2006.

However, the SLPR of each of the four Branch of Learning subgroups exceeds the benchmarks of all Australian universities which are sourced from the Student Outcome Indicators for Learning and Teaching Performance Fund (DEST 2007) (see notes Table 3). A benchmark encompassing all Branches of Learning is not available.

Table 3. Subject Load Pass Rate (SLPR) by Branch of Learning¹ 2003 – 2006
Student Load Passed as a Percentage of Student Load Assessed

Branch of Learning	2003	2004	2005	2006
Engineering, Processing	85%	85%	87%	89%
Built Environment	93%	91%	87%	91%
Agriculture, Renewable Resources	88%	89%	91%	89%
Sciences	88%	89%	88%	85%
Mathematics, Computing	82%	83%	81%	79%
Science, Computing, Engineering, Architecture, Agriculture				85%
Benchmark				81%
Admin, Business, Economics, Law	89%	86%	85%	84%
Benchmark				82%
Humanities	86%	87%	84%	84%
Social Studies	89%	90%	87%	87%
Education	94%	93%	93%	92%
Visual/Performing Arts	91%	90%	90%	91%
Humanities, Arts and Education				88%
Benchmark				85%
Health Sciences	95%	95%	95%	94%
Benchmark				90%
Total	89%	88%	87%	86%
Curtin Target			>88%	>88%
Benchmark			86%	NA

Rounding error may occur.

1. Data source: the Commonwealth annual student statistical collections. The Subject Load Pass Rates presented in the table exclude Higher Degree by Research student load.

Notes:

- Benchmark source: 2007 DEST Student Outcome Indicators for Learning and Teaching Performance Fund. The benchmark includes Commonwealth Supported bachelor degree students only.

Input

(d) Research Higher Degree Enrolments (Load) as a Percentage of Total Enrolments (Load)

One of Curtin's educational strategies consistent with its aim to raise the University's research profile is to increase research higher degree enrolments equal to or greater than 5% of total enrolments and EFTSL greater than or equal to 4.5% of total EFTSL.

Table 4A shows that enrolments in 2006 in terms of percentage share meets the target and equal the benchmark for Australian universities. But it is below the benchmark for Western Australian universities. The downturn in terms of percentage share in EFTSL

reported in Table 4B has been somewhat reversed in 2006. However, the percentage is still below the target as well as the benchmark for both Western Australian and Australian universities. Actual EFTSL rose modestly in 2006. Curtin ranks 20th in enrolments and 25th in EFTSL. These rankings place Curtin in the middle or lower half of the list of 48 Australian higher education institutions for this measure (DEST, 2005).

Also noteworthy is the continuing resurgence in Masters enrolments this year.

Table 4A. Research Higher Degree Enrolments by Level and Total Research Enrolments as a Percentage of Total Curtin Enrolments: 2002 – 2006

Research Higher Degree	2002	2003	2004	2005	2006
Masters	274	247	210	259	282
Doctoral	1213	1403	1445	1495	1442
Total Research	1487	1650	1655	1754	1724
% of Total Enrolments	4.8%	5.1%	5.0%	4.9%	5.0%
Curtin Target				= > 5.0%	= > 5.0%
All WA Universities				5.3%	5.2%
All Australian Universities				5.0%	5.0%
National Ranking (All Australian Universities)				21	20

Notes:

- All enrolment data are for the year at 31 March.
- Benchmarks source: DEST Selected Higher Education Student Statistics 2005 for Western Australian and Australian universities.

Table 4B. Research Higher Degree EFTSL by Level and Total Research EFTSL as a Percentage of Curtin's Total EFTSL 2002 – 2006

Research Higher Degree	2002	2003	2004	2005	2006
Masters	158	110	89	126	154
Doctoral	766	814	840	831	849
Total Research	924	924	929	957	1003
% of Total EFTSL	4.4%	4.2%	4.1%	4.0%	4.2%
Curtin Target				= > 4.5%	= > 4.5%
All WA Universities				4.9%	4.9%
All Australian Universities				5.0%	5.0%
National Ranking (All Australian Universities)				26	25

Notes:

- All EFTSL data are for the year at 31 March.
- Benchmarks source: DEST Selected Higher Education Student Statistics 2005 for Western Australian and Australian universities.

A1.2 EFFICIENCY INDICATORS

A1 TEACHING AND LEARNING (T&L)			
	Ref	Name	Output/Objectives
A1.2 Efficiency	e	Teaching and Learning Expenditure per EFTSL	T&L Expenditure
	f	Teaching and Learning Expenditure per Successful EFTSL	T&L Expenditure
	g	Graduate Productivity Rate	Student Progress & Achievement

Teaching and Learning Expenditure

(e) Teaching and Learning Expenditure per EFTSL

(f) Teaching and Learning Expenditure per Successful EFTSL

Teaching and Learning expenditure relates to the teaching of award course programs. The two indicators reported in Table 5A (over) show: (i) the average cost of teaching each Equivalent Full-Time Student Load (EFTSL) where load is sourced from the Commonwealth annual statistical collections; and (ii) the average cost of teaching each successful EFTSL. Both of these provide an insight into the efficiency with which monies directed towards the Teaching and Learning objective have been spent. Table 5B (over) shows the comparison after adjusting for inflation.

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, Northam, Esperance, Margaret River, Albany, Geraldton and the Pilbara.

An increase in the 2006 expenditure per EFTSL together with static total taught EFTSLs and successful EFTSLs place Curtin above the target.

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Section A – Higher Education

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Table 5A. Teaching and Learning Expenditure¹ at Historical Cost 2003 – 2006

	2003	2004	2005	2006
(1) Actual Expenditure (\$'000)	\$312,896	\$325,837	\$338,091	\$348,880
(2) Total Taught EFTSL	22,184	22,543	23,905	23,814
(3) Successful EFTSL	19,677	19,748	20,773	20,575
(i) Teaching and Learning Expenditure (\$)/EFTSL	\$14,105	\$14,454	\$14,143	\$14,650
Curtin Target			\$14,500	\$14,500
Benchmark (Average WA Universities prior year)			\$16,984	\$17,494
(ii) Teaching and Learning Expenditure (\$)/Successful EFTSL	\$15,901	\$16,500	\$16,275	\$16,957
Curtin Target			\$16,500	\$16,500

1. Teaching and Learning Expenditure reported above excludes that for the Kalgoorlie VET sector. All University Expenditure is now reported: (i) on Teaching and Learning or Research and Development, in line with the University's objectives; and (ii), consistent with the University's Financial Statements. For these reasons, the data may differ from those shown in earlier Annual Reports.

Notes:

- Benchmark source: From Murdoch University's T&L expenditure per EFTSL spreadsheet. Benchmark for T&L expenditure per successful EFTSL is unavailable.

Table 5B. Teaching and Learning Expenditure at Constant Dollar Value 2003 – 2006

Expenditure & EFTSL details	2003	2004	2005	2006
(1) Actual Expenditure (\$'000)	\$333,154	\$339,001	\$344,515	\$348,880
(2) Total Taught EFTSL	22,184	22,543	23,905	23,814
(3) Successful EFTSL	19,677	19,748	20,773	20,575
Indicator (i) Teaching and Learning Expenditure (\$)/EFTSL	\$15,018	\$15,038	\$14,412	\$14,650
Indicator (ii) Teaching and Learning Expenditure (\$)/Successful EFTSL	\$16,931	\$17,167	\$16,584	\$16,957
Cost Adjustment Factor/Higher Education Indexation Factor ¹	1.161183	1.188354	1.213309	1.236362

1. Cost Adjustment Factors and Higher Education Indexation Factor in the table are extracted from Appendix F, page 115, of DEST Higher Education Report 2005 and can be used to convert historical cost figures to December 2006 price levels. From 2005 the Higher Education Indexation Factor has replaced the Higher Education Cost Adjustment Factor (CAF) but the two factors are comparable.

Student Achievement and Progress

The indicator Graduate Productivity Rates provides an insight into the efficiency with which monies directed towards the Teaching and Learning objective have been spent.

(g) Graduate Productivity Rates

These rates show changes over time in the output of graduates for every 10 full-time equivalent staff. Table 6A (below) provides the rates for undergraduate and postgraduate coursework students, where the numerator is based on graduate numbers and the denominator on 'teaching' and 'teaching and research' staff only.

postgraduate and undergraduate rate are considerably above the benchmark of the 2004 average for Australian Technology Network (ATN)¹. Both rates have increased over those in 2005 and the undergraduate rate is just short of the highest rate in the last four years achieved in 2003.

In 2006, both the undergraduate and postgraduate coursework rates met the Curtin target of more than 57 and 20 graduates per 10 FTE academic staff. Curtin's

Table 6A. Undergraduate and Postgraduate Coursework Degree Productivity Rates¹ 2003 – 2006
Graduations per 10 FTE Academic Staff²

	2003	2004	2005	2006
Undergraduate	62.2	52.6	60.5	62.0
Curtin Target			>57.0	>57.0
Benchmark (ATN in prior year)			49.3	50.0
Postgraduate Coursework	22.0	18.9	20.7	24.9
Curtin Target			>20.0	>20.0
Benchmark (ATN in prior year)			25.1	24.8

1. For each year shown (X) graduates (the numerator) are taken as those with awards approved in the period 1 January to 31 December in year X-1. Thus for 2006 there would have been 86.9 graduates for every 10 FTE teaching in the period 1 January 2005 to 31 December 2005.

2. Included in the denominator are staff from all funding sources categorised as 'teaching' or 'teaching and research'. An average of the staff in the current and previous two years is taken.

Notes:

- Curtin Source: Student Record System S1.
- Benchmark Source: 2003-2005 DEST Selected Higher Education Student and Staff Data Collection.

¹ The ATN universities consist of the five major former Institutes of Technology across Australia: Queensland University of Technology; University of Technology, Sydney; RMIT University; the University of South Australia and Curtin University of Technology.

Performance Indicators

Section A – Higher Education

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Table 6B (below) shows Postgraduate Research productivity rates with the data disaggregated to the Masters and Doctoral levels. The numerator uses completions rather than graduations while the denominator is restricted to staff eligible to supervise research students. There is

little change in both Masters and Doctoral completions in 2006. The rate remains below the Curtin target. On the other hand, the rate exceeds the benchmark which is the average of the 2004 research higher degree productivity rate for all ATN universities.

Table 6B. Research Higher Degree Productivity Rate 2003 – 2006
Research Higher Degree Completions per 10 full-time equivalent Academic Staff¹

	2003	2004	2005	2006
Masters	0.91	0.79	0.61	0.65
Doctoral	2.37	2.15	1.98	1.99
All Research	3.29	2.94	2.60	2.64
Curtin Target			>3.00	>3.00
Benchmark (ATN in prior year)			2.55	2.54

1. Staff data comprise a three year average of teaching and research academic staff of Lecturer B level and above in academic organisational units only and from all funding sources. Hourly paid academic staff are excluded. These staff data are derived from the Commonwealth annual statistical collections.

Notes:

- Curtin Source: Graduate Studies.
- Benchmark Source: 2003-2005 DEST Selected Higher Education Student and Staff Data Collection.

Performance Indicators

Section A – Higher Education

A2 RESEARCH AND DEVELOPMENT

The research funding and publications indicators presented below signal the University's performance in relation to Curtin's Strategic Objective for research:

Focus on areas of high impact, high quality research.

A2.1 EFFECTIVENESS INDICATORS

A2 RESEARCH AND DEVELOPMENT (R&D)			
	Ref	Name	Output/Objectives
A2.1 Effectiveness	h	Research Performance Index (RPI) Points by Range of Research Programs	RPI Output
	i	Institutional Grants Scheme (IGS): Comparison between Curtin and all Australian Universities	IGS Funding
	j	All Research Funding: Comparison between Curtin and the Averages for ATN Universities and National Ranking	Research Funding
	k	Cooperative Research Centre (CRC) Funding: Comparison between Curtin and all Australian Universities	Research Funding
	l	Number of Research Publications: Comparison between Curtin and the Averages for ATN and all Australian Universities	Research Publications

Data for five performance indicators that assist in demonstrating how effectively Curtin is meeting its Research and Development Objective are presented below. One indicator (h) uses the University's Research Performance Index (RPI), which measures the quantity, quality and impact of research outputs and outcomes; three indicators (i), (j) and (k) show the quantity of research funding; while another indicator (l) measures research publications output.

These indicators are compared to those for other universities to determine Curtin's relative performance. They are presented alongside averages for the universities in the Australian Technology Network (ATN) and the broad spectrum of Australian universities.

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Section A – Higher Education

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Research Performance Index Output

(h) Research Performance Index Points by Range of Research Programs

This indicator uses Curtin's RPI as a measure of research effectiveness. Curtin's Research and Development Committee gathers pertinent research data as one basis for distributing research funds within the University. Annual reviews of the RPI scheme by the University's Research and Development Committee have progressively made it a more effective instrument, better capturing research quality, scholarship and productivity rather than simply reflecting the amount of general research activity.

The indicators carry a one-year time lag because RPI points for a given calendar year cannot be determined until all input data have been subject to internal verification by the Office of Research and Development. Verification commences at the start of the year following the year in which the research activity occurred. As such, the latest available data are for 2005.

Table 7 (below) shows RPI points by research area for the years 2002 to 2005. The four year trend demonstrates an overall increase in research activity, particularly in Public Health & Rehabilitation, Telecommunication Research, Mining & Mineral Technology, Cognitive Science & Cognitive Ergonomics, and Information System & Technology programs. Yearly fluctuations in RPI levels by research programs result from higher (or lower) research performance, the commencement of new research efforts within programs, and the phasing out of other programs.

The overall number of RPI points generated continues to improve and is progressing towards the target despite the annual review process becoming more stringent in recent years. As this indicator is exclusive to Curtin, benchmarking is not possible.

Table 7. RPI Points by Range of Research Programs 2002 – 2005

Research Program	2002	2003	2004	2005
Public Health & Rehabilitation	59,951	66,980	56,435	87,774
Exploration Geosciences	40,586	46,328	50,482	34,689
Cultural & Regional Studies	27,182	30,916	37,259	26,733
Education	24,173	42,889	35,707	33,861
Environmental Management	35,245	39,451	36,962	41,287
Engineering Technology	17,772	19,374	21,707	21,762
Telecommunications Research	10,891	12,418	8,887	19,957
Mining & Minerals Technology	27,418	31,686	50,622	59,377
Biomedical Science & Technology	21,404	17,556	19,255	17,355
Enterprise Effect. & Econ. Performance	18,376	35,848	36,272	35,502
Cognitive Science & Cognitive Ergonomics	8,102	9,415	16,187	20,285
Marine Science & Technology	11,781	9,330	14,782	13,183
Information Systems & Technology	13,195	9,771	22,040	27,154
Agribusiness	2,536	2,917	5,586	7,523
Total	318,612	374,878	412,182	446,441
Curtin Target			450,000	450,000

Institutional Grant Scheme Allocation

(i) Institutional Grant Scheme Allocation: Comparison between Curtin and all Australian Universities

The IGS is considered a key national research performance indicator. It was implemented by the Commonwealth on 1 January 2002 and comprises funding previously allocated under the Research Quantum and the Small Research Grant Scheme. It is distributed across universities by a performance-based formula comprising research income, weighted 60 per cent; publications, 10 per cent; and using the two most recent years' data on higher degree research student places (measured in EFTSL), 30 per cent. The Research Quantum was that component of the Operating Grant used to support research activities other than those directly linked to teaching and research training.

Table 8 (right), providing IGS allocations by university, is ranked according to each institution's share of the total IGS for 2006. Curtin remains at 13th place in 2006 and sits above the midpoint in this ordering in which the ATN universities are identified through use of italics, the Western Australian universities with bold type, and those with medical schools and supporting departments with the letter 'M'. This last group of universities has the advantage of enhanced access to National Competitive Research Grants schemes (for example, medical research funding through National Health & Medical Research Council). They include the University of Western Australia, the only Western Australian university performing at a higher level than Curtin. Curtin's IGS allocation should be assessed in this context.

Curtin has maintained its national ranking of 13th in 2006.

Table 8. Institutional Grant Scheme Funds and Percentage Shares 2004-2006

Ranking According to % IGS Share in 2006

Rank	University	(\$'000)	(% share) 2006	(% share) 2005	(% share) 2004
1	University of Melbourne (M)	33,985	11.5	11.3	11.0
2	University of Sydney (M)	30,523	10.3	10.3	10.2
3	University of Queensland (M)	28,731	9.7	10.0	10.2
4	University of New South Wales (M)	23,022	7.8	8.2	8.6
5	Monash University (M)	21,370	7.2	7.2	7.1
6	Australian National University	17,664	6.0	5.7	5.6
7	University of Western Australia (M)	16,821	5.7	5.6	5.6
8	University of Adelaide (M)	16,371	5.5	5.6	5.6
9	University of Tasmania (M)	7,235	2.4	2.5	2.6
10	University of Newcastle (M)	7,024	2.4	2.3	2.4
11	Flinders University of SA (M)	6,364	2.1	2.3	2.4
12	Griffith University	6,359	2.1	2.2	2.3
13	CURTIN UNIVERSITY OF TECHNOLOGY	6,071	2.1	2.0	2.0
14	University of Wollongong	5,752	1.9	1.9	1.9
15	La Trobe University	5,677	1.9	2.0	2.1
16	Macquarie University	5,652	1.9	2.0	2.1
17	<i>Royal Melbourne Institute of Technology</i>	5,477	1.8	1.8	1.7
18	Murdoch University	5,431	1.8	1.7	1.6
19	<i>Queensland University of Technology</i>	5,385	1.8	1.7	1.7
20	<i>University of South Australia</i>	4,773	1.6	1.6	1.7
21	Deakin University	4,258	1.4	1.3	1.1
22	<i>University of Technology, Sydney</i>	4,216	1.4	1.4	1.4
23	James Cook University	3,938	1.3	1.4	1.4
24	University of New England	3,478	1.2	1.2	1.3
25	University of Western Sydney	3,328	1.1	1.2	1.2
26	Swinburne University of Technology	2,414	0.8	0.7	0.7
27	Victoria University of Technology	2,039	0.7	0.7	0.6
28	Edith Cowan University	1,825	0.6	0.6	0.5
29	University of Canberra	1,709	0.6	0.6	0.6
30	Charles Sturt University	1,564	0.5	0.5	0.5
31	Charles Darwin University*	1,453	0.5	0.4	0.4
32	Southern Cross University	1,416	0.5	0.5	0.5
33	Central Queensland University	1,291	0.4	0.4	0.4
34	University of Southern Queensland	1,061	0.4	0.4	0.3
35	University of Ballarat	779	0.3	0.2	0.2
36	Australian Catholic University	705	0.2	0.2	0.2
37	Australian Maritime University	240	0.1	0.1	0.1
38	University of Sunshine Coast	208	0.1	0.1	0.0
39	Melbourne College of Divinity	201	0.1	0.1	0.1
40	Batchelor Inst Indigenous Tertiary Ed	116	0.0	0.0	0.0
41	University of Notre Dame, Australia	95	0.0	0.0	0.0
42	Bond University	92	0.0	0.0	0.0
Total		296,113	100.0	100.0	100.0

*Formerly as Northern Territory University.

Research Funding

(j) All Research Funding: Comparison between Curtin, the Average of all ATN Universities, and National Ranking

Table 9. All Research Funding: Comparison between Curtin, the Average of all ATN Universities and National Ranking 2003 – 2005

Source of Research Funding	2003			2004			2005		
	Curtin \$'000	ATN ¹ \$'000	Nat Rank	Curtin \$'000	ATN ¹ \$'000	Nat Rank	Curtin \$'000	ATN ¹ \$'000	Nat Rank
Australian Competitive Research Grants ²	6,277	6,303	21	7,721	7,723	20	8,640	9,848	19
Other Public Sector Research Funding ²	9,602	7,837	10	8,752	7,515	12	7,985	7,987	15
Industry & Other Funding for Research ²	9,528	6,725	12	10,855	7,904	12	13,650	8,601	10
Cooperative Research Centres Funds ³	4,620	2,701	11	5,145	2,958	9	6,156	3,333	7
Other Sources (ie IGS & Research Infrastructure)	6,733	5,852	16	7,188	6,244	16	7,564	6,637	17
Total	36,761	29,418	12	39,662	32,344	13	43,996	36,406	11
Curtin Target						12			12

1. ATN refers to the average of all ATN Universities.

2. Source data: the Commonwealth's Finance and Publications Research Data Collection and made available to institutions by the Australian Vice-Chancellors' Committee (AVCC).

3. CRC data are obtained for all Australian universities from the Department of Education, Science and Technology (DEST). For further information see Table 10.

Notes:

- Except for CRC data, which are reported for financial years, financial data are for calendar year periods.

In Table 9 (above) the indicator All Research Funding uses allocations by source to demonstrate the level of research undertaken at Curtin in 2003, 2004 and 2005 compared with the ATN and all Australian universities' averages. Evidence of outcomes in relation to the Research and Development objective can be

demonstrated by Curtin's continued overall higher performance in relation to the ATN average. Curtin improved its position by two places to 11th in the national ranking in the sector (42 universities) exceeding the target of 12th place.

(k) Cooperative Research Centre (CRC) Funding: Comparison between Curtin and all Australian Universities

Table 10 (right) expanding upon the Co-operative Research Centre Funding data in Table 9, demonstrates the amount of applied collaborative research at Curtin reflecting in particular the University's commitment to collaboration with external organisations in research and development, technology transfer and innovation. Success in CRC funding is thus an expression of another of the University's strategic objectives: Engage in productive national and international partnerships.

Established through the Commonwealth Government's Cooperative Research Centres Program, CRCs link public and private sectors across Australia, bringing together a wide range of expertise and facilities, with a focus on new and innovative research, leading to competitive technological applications. Commonwealth CRC funding data differ from those for the other research funding categories insofar as it covers the financial rather than the calendar year.

Curtin exceeded its target by improving its national ranking from 9th in 2005 to 7th in 2006.

Table 10. DEST CRC Funding Financial Year 2005/2006
% DEST CRC Funding Financial Years 2003/2004, 2004/2005
and 2005/2006
University Ranking According to % Share in 2005/2006

Rank	University	(\$'000)	(% share) 05/06	(% share) 04/05	(% share) 03/04
1	University of Queensland	17,990	13.9	13.0	13.5
2	University of Melbourne	12,479	9.6	7.8	7.3
3	Monash University	11,732	9.0	8.2	7.8
4	University of Sydney	6,997	5.4	4.9	8.4
5	University of Western Australia	6,685	5.2	6.1	4.3
6	University of Adelaide	6,684	5.2	5.5	4.5
7	CURTIN UNIVERSITY OF TECHNOLOGY	6,156	4.7	4.6	4.1
8	James Cook University	5,871	4.5	4.8	5.3
9	University of Tasmania	4,654	3.6	4.6	4.9
10	University of New South Wales	4,135	3.2	3.2	4.8
11	<i>Queensland University of Technology</i>	4,133	3.2	3.0	2.3
12	Griffith University	4,106	3.2	4.4	4.3
13	Murdoch University	4,039	3.1	2.9	2.8
14	Southern Cross University	3,638	2.8	2.3	0.7
15	Australian National University	3,327	2.6	3.6	3.6
16	<i>Royal Melbourne Institute of Technology</i>	3,310	2.6	3.2	4.1
17	University of New England	3,238	2.5	2.6	1.9
18	University of Wollongong	2,901	2.2	2.2	2.4
19	<i>University of South Australia</i>	2,481	1.9	1.8	1.0
20	Swinburne University of Technology	2,294	1.8	2.7	2.9
21	University of Canberra	1,854	1.4	1.2	1.5
22	Charles Darwin University*	1,782	1.4	1.1	0.8
23	Charles Sturt University	1,471	1.1	1.1	0.6
24	University of Newcastle	1,318	1.0	1.3	1.4
25	Victoria University of Technology	1,082	0.8	0.8	0.5
26	La Trobe University	992	0.8	0.8	1.4
27	University of Central Queensland	953	0.7	0.6	0.6
28	Macquarie University	897	0.7	0.5	0.7
29	Flinders University of SA	874	0.7	0.4	0.3
30	<i>University of Technology, Sydney</i>	583	0.4	0.5	0.6
31	Deakin University	364	0.3	0.4	0.4
32	University of Western Sydney	342	0.3	0.0	0.0
33	University of Southern Queensland	189	0.1	0.0	0.0
34	Batchelor Inst Indigenous Tertiary Ed	63	0.0	0.0	0.0
35	Edith Cowan University	26	0.0	0.0	0.0
36	Australian Catholic University	0	0.0	0.0	0.0
37	Australian Maritime College	0	0.0	0.0	0.0
38	Bond University	0	0.0	0.0	0.0
39	Melbourne College of Divinity	0	0.0	0.0	0.0
40	University of Ballarat	0	0.0	0.0	0.0
41	University of Notre Dame, Australia	0	0.0	0.0	0.0
42	University of Sunshine Coast	0	0.0	0.0	0.0
Total		129,640	100.0	100.0	100.0

*Formerly as Northern Territory University.

Performance Indicators

Section A – Higher Education

Research Publications

(I) Number of Research Publications: Comparison between Curtin, the Average of all ATN Universities, and the Average of all Australian Universities

Research publications are considered an important measure of research performance throughout the university sector. The publication of a piece of research demonstrates that referees, expert in the appropriate field, have judged the work worthy of acceptance and dissemination. The number of publications produced is a measure of the quantity and quality of research and development underway or completed.

Table 11 gives Curtin’s relative performance in respect of the Publications indicator over the period 2003 – 2005 against averages for the ATN and all Australian universities. Despite the publication rate continuing to recover from the low in 2001 of an overall total of 548.7, it is still below the national average and the average for ATN universities. Additional initiatives and incentives have been put in place to address the under achievement.

These include:

- facilitating support to researchers by clustering them into cross-disciplinary teams and introducing mentorship programs.
- emphasising to researchers the importance of prioritising publication activities within their workload and of ensuring that their publications are suitable for recognition by the Department of Education, Science and Training (DEST).
- investigating ways to reward publishing success through the Research Performance Index (RPI) scheme.

Table 11. Number of Research Publications: Comparison between Curtin, Average of all ATN Universities and Average of all Australian Universities¹ 2003 – 2005

Publication Type	2003			2004			2005		
	Curtin	ATN ²	All ³	Curtin	ATN ²	All ³	Curtin	ATN ²	All ³
Books	7.0	8.5	12.4	11.8	11.9	15.5	6.5	8.8	16.5
Book Chapters, Journal Articles, Conference Publications	672.3	819.2	776.7	902.1	926.6	880.9	915.0	1018.6	967.2
Total	679.3	827.7	789.0	914.0	938.5	896.4	921.5	1027.5	983.7
Curtin Target				896.4			983.7		

1. Source data for Research publications data: the Commonwealth’s Finance and Publications Research Data Collection and made available to institutions by the Australian Vice-Chancellors’ Committee (AVCC).

2. ATN refers to the average of all ATN Universities.

3. All refers to the average of all Australian Universities.

A2.2 EFFICIENCY INDICATORS

A2 RESEARCH AND DEVELOPMENT (R&D)			
	Ref	Name	Output/Objectives
A2.2 Efficiency	m	Research Expenditure and RPI Points	Resource Use
	n	Research Performance Index Points per FTE Academic Staff	RPI Productivity
	o	Research Funding per 10 FTE Academic Staff: Comparison between Curtin and the Averages for ATN Universities and National Ranking	Comparative Research Funding
	p	Research Publications per 10 FTE Academic Staff: Comparison between Curtin and the Averages for ATN Universities and all Australian Universities	Research Publications

Data relating to four performance indicators that show the efficiency with which Curtin is meeting its Research and Development Objective are presented. Two indicators: (m) Research Expenditure and Research Performance Index (RPI) Points, and (n) the Research

Performance Index Points per FTE Academic Staff, use the University's own Research Performance Index; the third (o), Research Funding, is self explanatory; and the fourth (p) details Research Publications performance.

Resource Use

(m) Research Expenditure and Research Performance Index Points

Two indicators reflect the University's performance in respect of R&D. These are Research Expenditure, and Curtin's internal Research Performance Index (RPI).

The research expenditure shown in Table 12 (over) comprises expenditure from funds specifically provided for research, including infrastructure funds. In line with the University's Mission statement, expenditure can only be on activities supporting either the Research and Development or Teaching and Learning Objectives. The basis for the RPI is approximately 50% research income (weighted to encourage performance in specific grants)

and 50% non-financial research performance indicators, such as research publications, postgraduate completions and conference presentations. The financial aspect of the RPI therefore has a relationship to research expenditure whilst the non-financial aspects do not. The two indicators may therefore be expected to change at differing rates as they are measuring different aspects of research performance.

As RPI is exclusive to Curtin, benchmarking is not possible.

Table 12. Research Expenditure at Historical and Constant Cost Levels and Research Performance Index Points, 2002 – 2006

	2002	2003	2004	2005	2006
Actual Research Expenditure (\$'000)	\$52,672	\$59,402	\$64,862	\$65,822	\$69,123
Cost Adjustment Factor/Higher Education Indexation Factor ¹	1.134358	1.161183	1.188354	1.213309	1.236362
Constant Research Expenditure (\$'000)	\$57,408	\$63,248	\$68,257	\$67,073	\$69,123
RPI Points ²	318,612	374,878	412,182	446,441	n/a ³

1. Cost Adjustment Factor/Higher Education Indexation Factor in the Table are extracted from Appendix F, page 115, of DEST Higher Education Report for 2005 and can be used to convert historical cost figures to December 2006 price levels.

2. RPI points are partly determined by expenditure data. The determinants of RPI points are more fully described in the narrative accompanying Table 7.

3. n/a - not currently available

Notes:

- All University Expenditure is now reported: (i) on Teaching and Learning or Research and Development, in line with the University's Mission; and (ii), consistent with the University's Financial Statements. For these reasons, the data may differ from those shown in earlier Annual Reports.

RPI Productivity

(n) Research Performance Index Points per FTE Academic Staff

Table 13 (below) links RPI points and the University's full-time equivalent (FTE) research staff as a ratio of points per FTE academic.

These data are impacted by the capping of the amount of funding available for distribution under the RPI scheme and the improved accuracy of staff classification in 2004. A number of staff formerly excluded from

the denominator for this measure, are now correctly counted as contributing to research. The downward trend evident in 2001- 2002 has been reversed in 2003, with continuing growth in 2004 and 2005 which in 2005 surpassed the Curtin target. As RPI is exclusive to Curtin, benchmarking is not possible.

Table 13. RPI Points per FTE Academic Staff¹ 2001 – 2005

	2002	2003	2004	2005	2006
RPI points	314,642	318,612	374,878	412,182	446,441
FTE Academics	716	793	810	844	846
RPI points/FTE Academic	440	402	463	488	528
Curtin Target				500	500

1. Academic research staff are defined as Full-Time Equivalent (FTE) academic staff from all funding sources in academic organisational units only, and include teaching & research staff with a level of Lecturer B or above and research-only academic staff at all levels. Hourly paid academic staff are excluded.

Performance Indicators

Section A – Higher Education

Comparative Research Funding

(o) Research Funding per 10 FTE Academic Staff: Comparison between Curtin, the Average of all ATN Universities, and the National Ranking

The indicator Research Funding per 10 FTE Academic Staff provides an insight into the efficiency with which monies directed towards the Research and Development goal have been spent.

Table 14 (below) compares Curtin's research funding performance per 10 FTE academic staff with the averages for the ATN and all Australian universities. Curtin's funding of \$519,000 per 10 FTE remains above the ATN average and surpasses the Curtin target. National ranking remains at 17th place.

Table 14. Research Funding per 10 FTE Academic Staff: Comparison between Curtin, the Average of all ATN Universities and the National Ranking 2003 – 2005¹

Source of Research Funding	2003			2004			2005		
	Curtin \$'000 /10 FTE	ATN ² \$'000 /10 FTE	Nat Rank	Curtin \$'000 /10 FTE	ATN ² \$'000 /10 FTE	Nat Rank	Curtin \$'000 /10 FTE	ATN ² \$'000 /10 FTE	Nat Rank
Australian Competitive Research Grants	77	80	27	92	93	24	102	116	23
Other Public Sector Research Funding	118	96	13	104	89	15	94	92	19
Industry & Other Funding for Research	118	84	14	129	96	13	161	101	10
Cooperative Research Centre Funds	57	32	9	61	35	11	73	38	8
Other Sources (i.e IGS, Research Quantum & Research Infrastructure)	83	73	21	85	75	21	89	77	21
Total	453	365	20	471	388	17	519	425	17
Curtin Target				500			500		

1. FTE Academics are from all funding sources in academic organisational units and include the category of teaching & research staff with a level of Lecturer B or above and research only academic staff at all levels. Hourly paid academic staff are excluded. All staff data are derived from the Commonwealth annual statistical collections.

2. ATN refers to the average of all ATN Universities.

Research Publications

(p) Number of Research Publications per 10 FTE Academic Staff: Comparison between Curtin, the Average of all ATN Universities, and the Average of all Australian Universities

Research publications per 10 full-time equivalent (FTE) academic staff at Curtin are provided in Table 15 and compared with the publication rates for ATN and all Australian universities. All staff data are derived from the Commonwealth annual statistical collections. The definition of academic research staff is identical to that used for efficiency indicators (n) and (o).

Table 15 shows that in respect of the number of research publications per 10 FTE Academic staff, Curtin's output over the last pass year has plateaued and remains below both the ATN and national average. Initiatives have been put in place to address the under achievement (see indicator A2.1 (l)).

Table 15. Number of Research Publications per 10 FTE Academic Staff¹: Comparison of Curtin, Average of all ATN Universities and Average of all Australian Universities, 2003 – 2005

Publication Type	2003			2004			2005		
	Curtin	ATN ²	All ³	Curtin	ATN ²	All ³	Curtin	ATN ²	All ³
Books	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.2
Book Chapters, Journal Articles, Conference Publications	8.3	10.2	10.7	10.7	11.1	11.0	10.8	11.8	12.3
Total	8.4	10.3	10.9	10.8	11.2	11.2	10.9	11.9	12.5
Curtin Target				11.2			12.5		

1. FTE Academics are from all funding sources in academic organisational units and include the category of teaching & research staff with a level of Lecturer B or above and research only academic staff at all levels. Hourly paid academic staff are excluded.
2. ATN refers to the average of all ATN Universities.
3. All refers to the average of all Australian Universities.

Section B – Vocational Education and Training

Curtin’s desired outcome in respect of Vocational Skills Formation and Development is:

to supply quality teaching and skills formation services to both meet customer needs and provide education and training for employment in the region

The indicators appearing in box below and described below assist performance assessment.

B VOCATIONAL EDUCATION AND TRAINING			
	Ref	Name	Output/Objectives
B1 Effectiveness	q	Percentage of Graduates Satisfied with Courses	Graduate Satisfaction
	r	Employment Rate of Graduates	Employability
	s	Graduates in Further Study	Eligibility
B2 Efficiency	t	Expenditure per Student Curriculum Hour	Resources Use

B1 EFFECTIVENESS INDICATORS

Graduate Satisfaction

(q) Percentage of Graduates Satisfied with Courses

Table 16 (over) covering the years 2003 – 2006 signals the extent to which Curtin met individual student needs in terms of skills formation outcomes through provision of training services, and as assessed as part of a nationally conducted Graduate Survey.

In 2005 Curtin exceeded both State and national levels and demonstrated a significant improvement on 2003.

The national surveying body carries out biennial detailed small area sampling. In 2004 and 2006 the survey returns are deemed insufficient for reporting purposes.

Performance Indicators

Section B – Vocational Education and Training

Table 16. Graduate Satisfaction 2003 – 2006

	2003	2004	2005	2006
Curtin	73% (73%)	N/A	90% (89%)	N/A
Number of Respondents			1,558	
State	78% (77%)	N/A	87% (87%)	N/A
Number of Respondents			36,068	
National	79% (78%)	N/A	88% (88%)	N/A
Number of Respondents			345,012	

Notes:

- Bracketed percentages represent estimates prepared by the National Centre for Vocational Education and Research (NCVER), provided to the Western Australian Department of Training and Employment (WADOT), and are intended as a better measure of the full year's outcomes given the data collected in June. Unbracketed percentages are generated from actual rather than estimated responses.
- Rounding errors may occur.
- Data for 2004 and 2006 were unavailable because the national surveying body switched from annual to biennial 'detailed' small area sampling. Consequently the relevant 2004 and 2006 survey returns for Curtin were deemed insufficient for reporting purposes.
- Number of respondents, response rate in percentage, sample size and standard deviation for Curtin, state and national data in 2005 are sourced from NCVER report. Confidence level and interval are not reported.

Survey Data for 2005:

Curtin: Response rate = 99%; sample size = 423 and standard deviation = 0.8

State: Response rate = 99%; sample size = 7,089 and standard deviation = 0.9

National: Response rate = 99%; sample size = 43,004 and standard deviation = 0.8

Employability

(r) Employment Rate of Graduates

Table 17 (over), showing the proportion of graduates in employment in the year following their graduation, indicates the extent to which the desired outcomes were successfully achieved in terms of an employable and adaptable workforce.

Historically, comparative State and national data suggest that Curtin performs significantly better in terms of employment outcomes.

Performance Indicators

Section B – Vocational Education and Training

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Table 17. Graduates' Employment and Unemployment Rates 2003 – 2006

	2003		2004		2005		2006	
	No.	%	No.	%	No.	%	No.	%
CURTIN								
Employed	159	81% (79%)	N/A	N/A	372	89% (91%)	N/A	N/A
Unemployed	16	8% (10%)	N/A	N/A	22	5% (5%)	N/A	N/A
Not in Labour Force	19	10% (10%)	N/A	N/A	22	5% (4%)	N/A	N/A
Number of Respondents					1,541			
STATE								
Employed	4,085	73% (73%)	N/A	N/A	5,241	78% (78%)	N/A	N/A
Unemployed	657	12% (12%)	N/A	N/A	563	8% (9%)	N/A	N/A
Not in Labour Force	772	14% (13%)	N/A	N/A	866	13% (13%)	N/A	N/A
Number of Respondents					34,211			
NATIONAL								
Employed	29,996	75% (74%)	N/A	N/A	32,231	80% (79%)	N/A	N/A
Unemployed	4,785	12% (13%)	N/A	N/A	3,735	9% (10%)	N/A	N/A
Not in Labour Force	4,556	11% (11%)	N/A	N/A	4,347	11% (11%)	N/A	N/A
Number of Respondents					329,118			

Notes:

- Bracketed percentages represent estimates prepared by the National Centre for Vocational Education and Research (NCVER), provided to the Western Australian Department of Training and Employment (WADOT), and are intended as a better measure of the full year's outcomes given the data collected in June. Unbracketed percentages are generated from actual rather than estimated responses.
- Rounding errors may occur.
- Data for 2004 and 2006 were unavailable because the national surveying body switched from annual to biennial 'detailed' small area sampling. Consequently the relevant 2004 and 2006 survey returns for Curtin were deemed insufficient for reporting purposes.
- Numbers of respondents, response rate in percentage, and sample size for Curtin, state and national data in 2005 are sourced from NCVER report. Confidence level and interval and standard deviation are not reported.

Survey Data for 2005:

Curtin: Response rate = 99% and sample size = 417

State: Response rate = 98% and sample size = 6,693

National: Response rate = 98% and sample size = 40,517

Section B – Vocational Education and Training

Eligibility

(s) Graduates in Further Study

The proportion of graduates who enrol in further study provides another measure of effectiveness in achieving the desired outcome of meeting customer needs. Table 18 (below) provides these data for the period 2003 – 2006, with Curtin benchmarked against State and National data. Note that respondents may also be in work whilst engaging in further study. In comparing 2005 to 2003 results the lower percentage of graduates

enrolled in further study is in all likelihood a result of the very robust WA employment market for Curtin graduates as reflected in Table 17. The benchmarks for employment rate of graduates and graduates in further study need to be considered in concert. From this perspective the very positive employment outcomes for Curtin graduates which significantly exceed the State and National benchmark is considered more important.

Table 18. Graduates Enrolled in Further Study 2003 – 2006

	2003		2004		2005		2006	
	No.	%	No.	%	No.	%	No.	%
Curtin	45	34% (32%)	N/A	N/A	92	22% (20%)	N/A	N/A
Number of Respondents					1,529			
Target - Exceed State and National Percentages								
State	1,576	44% (45%)	N/A	N/A	2,416	37% (36%)	N/A	N/A
Number of Respondents					33,649			
National	10,729	42% (43%)	N/A	N/A	13,415	34% (33%)	N/A	N/A
Number of Respondents					324,042			

Notes:

- Bracketed percentages represent estimates prepared by the National Centre for Vocational Education and Research (NCVER), provided to the Western Australian Department of Training and Employment (WADOT), and are intended as a better measure of the full year's outcomes given the data collected in June. Unbracketed percentages are generated from actual rather than estimated responses.
- Rounding errors may occur.
- Data for 2004 and 2006 were unavailable because the national surveying body switched from annual to biennial 'detailed' small area sampling. Consequently the relevant 2004 and 2006 survey returns for Curtin were deemed insufficient for reporting purposes.
- Numbers of respondents, response rate in percentage, and sample size for Curtin, state and national data in 2005 are sourced from NCVER report. Confidence level and interval and standard deviation are not reported.

Survey Data for 2005:

Curtin: Response rate = 98% and sample size = 412

State: Response rate = 96% and sample size = 6,583

National: Response rate = 97% and sample size = 39,879

Performance Indicators

Section B – Vocational Education and Training

B2 EFFICIENCY INDICATOR

Resources Use

(t) Expenditure per Student Curriculum Hour

The indicator Expenditure per Student Curriculum Hour provides an insight into the efficiency with which monies directed towards the VET goal have been spent.

with the numerator definition altered to reflect Teaching or Non-Teaching Costs respectively, are shown together with an overall Total Cost per SCH indicator.

Table 19 (below) records expenditure and Student Curriculum Hours (SCH). Ratios of Expenditure to SCH,

Table 19. Expenditure per Student Curriculum Hour 2003 – 2006

	2003	2004	2005	2006
Total SCH	778,501	699,587	622,379	667,924
Curtin Target in SCH			565,388	565,388
Total T&L Expenditure	\$14,065,597	\$15,492,823	\$14,497,642	\$12,466,442 ¹
Teaching Expenditure per SCH	\$11.28	\$11.29	\$11.40	\$8.98
Non-Teaching Expenditure per SCH	\$6.76	\$10.86	\$11.90	\$9.68
Total Teaching Expenditure per SCH	\$18.04	\$22.15	\$23.30	\$18.66

1. Total T&L expenditure includes \$6.465m of other non-teaching related expenditure.

Notes:

- 2003 figures include non-teaching expenditure so as to fully reflect operational efficiency.
- Rounding Errors may occur.