

Using Cognos 8 Scorecards to monitor course viability

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DATA MANAGEMENT

*DATA SERVERS, DATA WAREHOUSE
AND DATA ARCHIVING (PRINCETON)*



ENTERPRISE CONTENT MANAGEMENT

INCLUDING FILENET PRODUCT PORTFOLIO



INFORMATION INTEGRATION & MASTER DATA MANAGEMENT

*PREVIOUSLY KNOWN AS ASCENTIAL,
DWL, SRD & TRIGO.*



BUSINESS INTELLIGENCE & PERFORMANCE MANAGEMENT

COGNOS

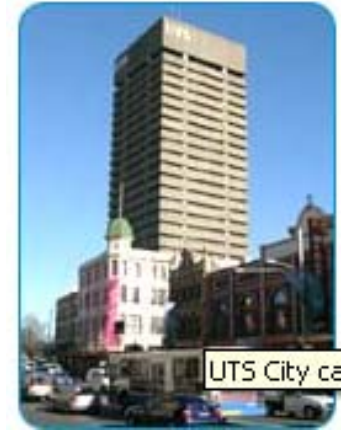
Agenda

- **Overview of UTS**
- **Milestones in the development of BI at UTS**
- **Overview of data currently available through the BI Portal & planned developments**
- **The life cycle of the student**
- **Demonstration/screenshots of the UTS BI Portal covering:**
 - Attracting students
 - Retaining students
 - Producing successful graduates
- **Bringing these measures together to show multiple metrics in a scorecard**

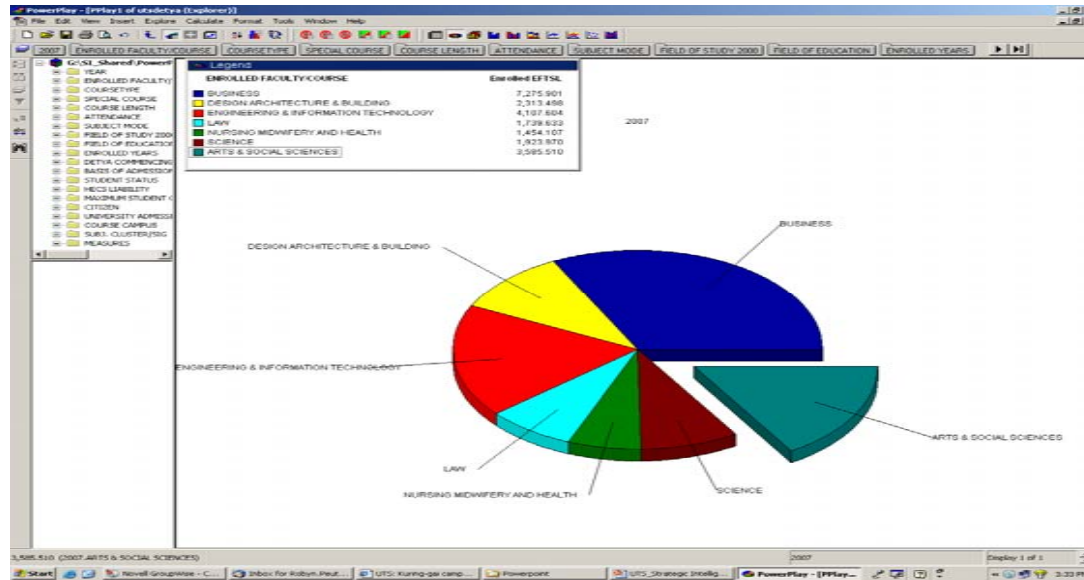


Overview of UTS (1)

- Formed as a University in 1990 by combining NSWIT, Kuring-gai College and others.
- A very diverse student population, 63% funded by Commonwealth Government and 37% pay full fees (26% international, 11% domestic)
- About 32,000 students spread across campuses in the inner City of Sydney (Broadway & Haymarket), on Sydney's upper North Shore (Kuring-gai) and with offshore partners in China, Hong Kong, Singapore and Thailand.
- Around 76% undergraduate, 20% postgraduate coursework and 4% higher degree research students



Overview of UTS (2)



- UTS has 7 Faculties, largest of which is Business.
- In 2007 UTS was recognised as performing in the top band of Universities in every discipline in the Commonwealth Government's Learning & Teaching Performance Fund (one of only 2 Universities to achieve this)
- A member of the Australian Technology Network of technology Universities (RMIT, QUT, Curtin University, University of South Australia and UTS)



Milestones in the development of BI at UTS

- **1997 – started using Cognos Powerplay to aggregate and disseminate statistics about UTS performance**
- **2005 – started using Cognos Metrics Manager to combine key metrics about course viability**
- **2006 – started using Cognos EP to develop University and Faculty/Division budgets**
- **2007 – upgraded to Cognos 8**
- **2007 – awarded a Workplace Productivity Grant from DEST (now DEEWR) to help fund the development of a Performance Management Framework**
- **2008 – work starts on building a new PM framework**



Data Sources for UTS BI

- Current:
 - The focus is on benchmarking and trend analytics
 - External data, historical collections
 - DEEWR Annual Student, Staff & Research Collections (for annual snap shots of student, staff, finance and research data) started in 1992.
 - UAC data warehouse (for data about applicants through UAC) started in 1996.
 - Annual Graduate Survey (for data on graduate destinations, CEQ & PREQ) started in 1996.
 - Internal data, historical collections
 - UTS DEEWR statistical returns (students, staff, research)
 - UTS internal surveys of students - Subject Feedback Survey results
 - Purpose-built extracts from the student system (CASS) to service load and fee monitoring, analysis of exam results and direct applications.



Data Sources for UTS BI

- Planned:
- **Purpose-built extracts from the research management, finance and HR systems to service KPI and performance management.**
- **Survey data from the UTS External Engagement Survey to service new KPIs.**
- **A datawarehouse or datamarts (decision pending) of student, finance, HR, research, graduate and customers/clients to allow the development of KPIs across systems.**
- **New KPIs will emerge which give us the ‘strategic’ angle which is currently lacking.**



These data are delivered through the UTS Portal Page, Cognos 8

Management Information Reporting - Cognos Connection - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address http://bi.uts.edu.au/cognos8/cgi-bin/cognosisapi.dll?b_action=xts.run&m=portal/cc.xts&gohome=

Cognos Connection Metric Studio Event Studio Query Studio Analysis Studio Report Studio

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Management Information Reporting How to... Public Folders My Folders

Management Information Reporting
By Audience, By Topic Area, By Data Source

By Audience

By Audience Entries: 1 - 10

- Course Performance Report
- Indigenous Students Reports
- International Office Reports
- Equity and Diversity Unit Reports
- KPIs
- LTPF
- Good University Guide
- Faculty Specific Reports
- Library Stats
- Marketing & Communications Unit

By Topic Area

By Topic Area Entries: 1 - 9

- Applications for Courses
- DEST reported income and expenditure
- Graduate Feedback
- Research Performance
- Staffing Levels
- Student Completions
- Student Enrolment and Load
- Student Performance
- Student Feedback Survey Results

By Data Source

By Data Source Entries: 1 - 7

- UTS CASS
- DEST - NATIONAL DATA
- GRADUATE CAREERS AUSTRALIA
- UTS STUDENT SURVEYS
- UNIVERSITIES ADMISSION CENTRE
- UTS DEST SUBMISSIONS
- UTS SYLLABUS PLUS

Shared Folder

Shared Folder Entries: 1 - 10

- MIR_Cashews
- MIR_Cashews Expert
- MIR_CASS Management Report Users
- MIR_EDU Users
- MIR_POU Admin Users
- MIR_POU Funding
- MIR_SAU CASS
- MIR_Scorecard
- MIR_SFS Deans
- MIR_SFS User

Cognos Search

Search: Name field

Advanced

Documentation

Documentation Entries: 1 - 5

- DEST Statistics Publications page
- Exploring the UTS-CPR in Cognos 8 Metrics Studio
- Request for Access Form
- User Responsibility Declaration Form
- UTS Business Intelligence Portal, Management Information Handbook

Enterprise Planning

Enterprise Planning Entries: 1 - 1

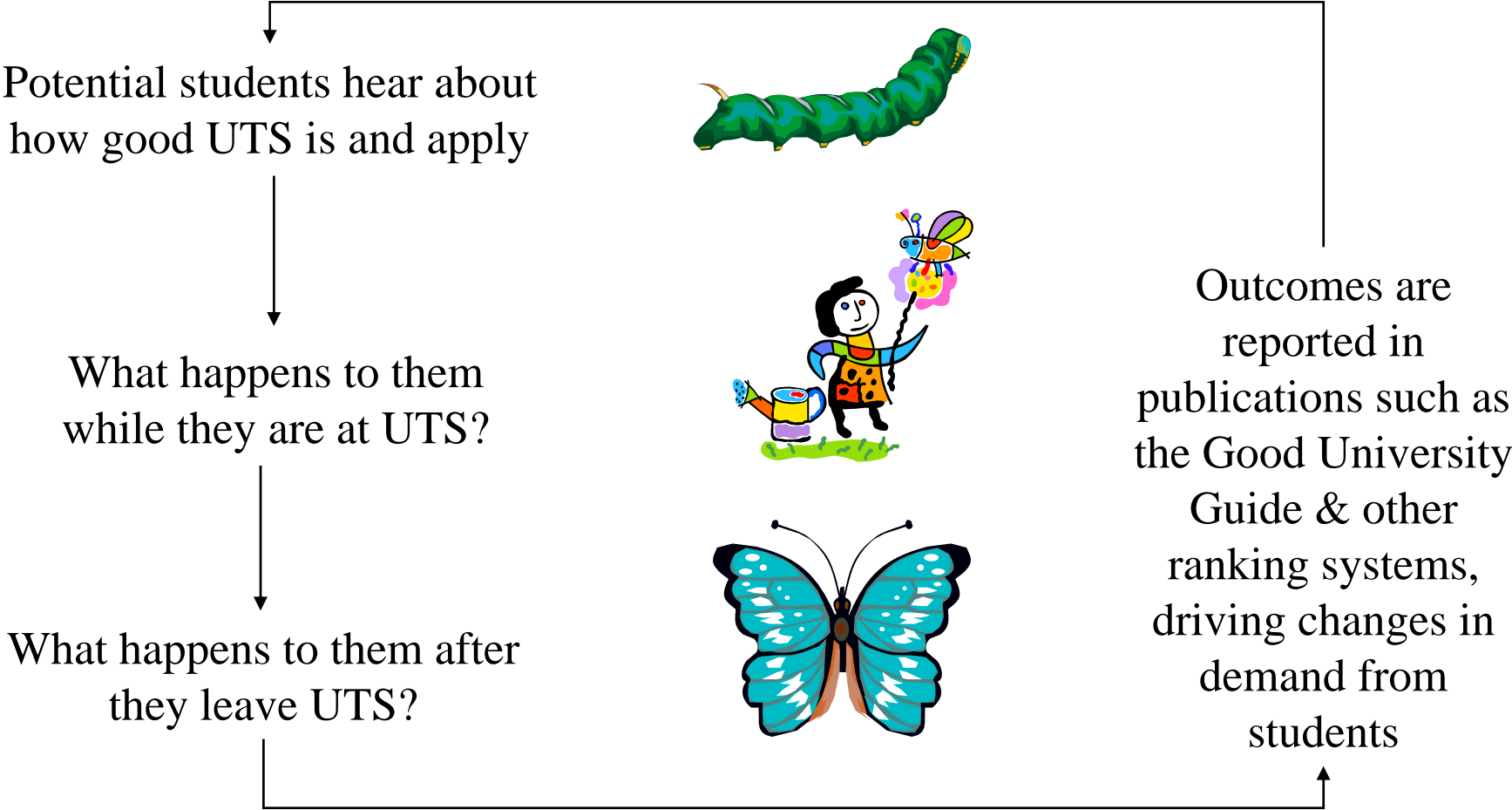
- UTS_POU Faculty Funding

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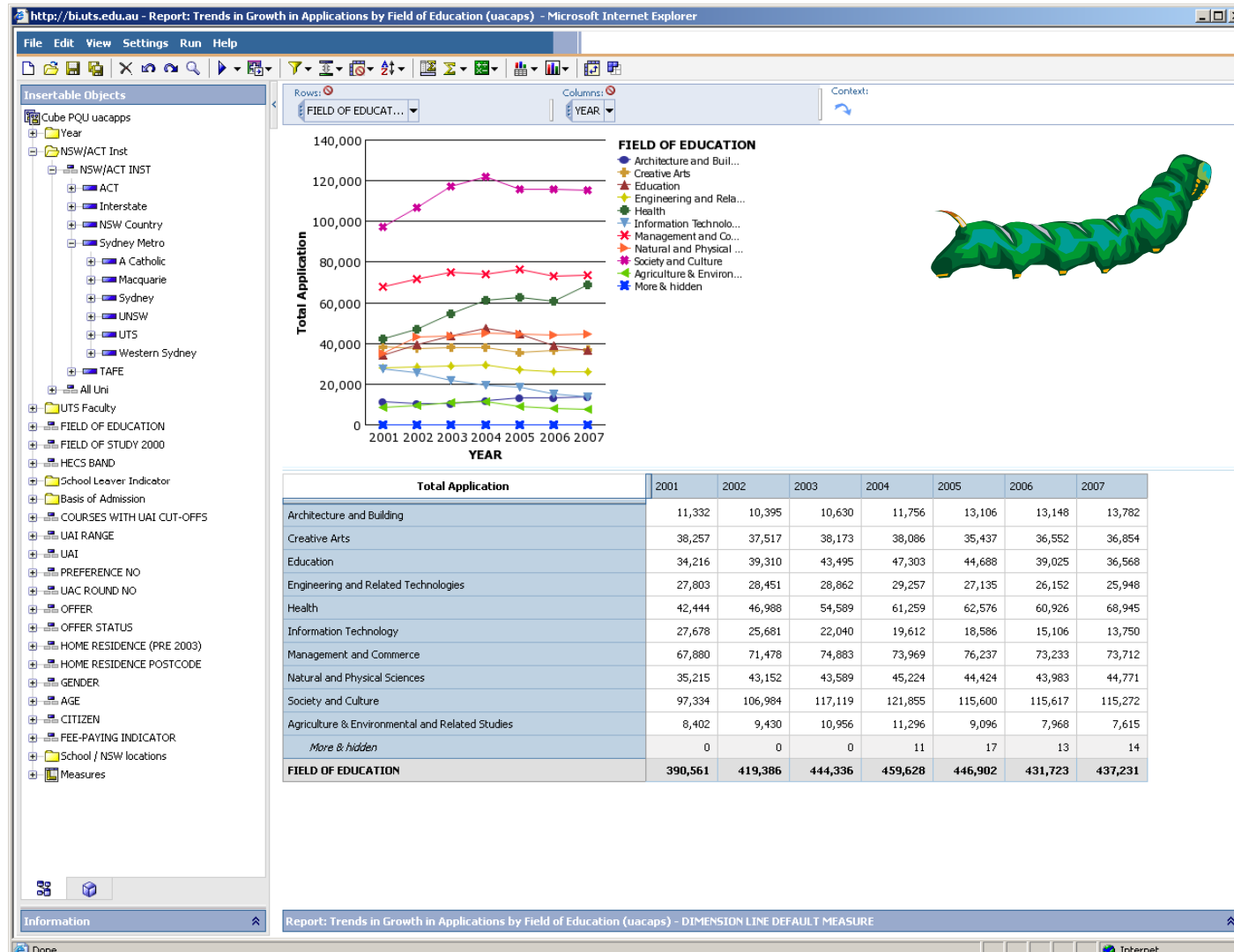
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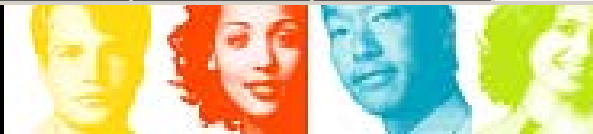
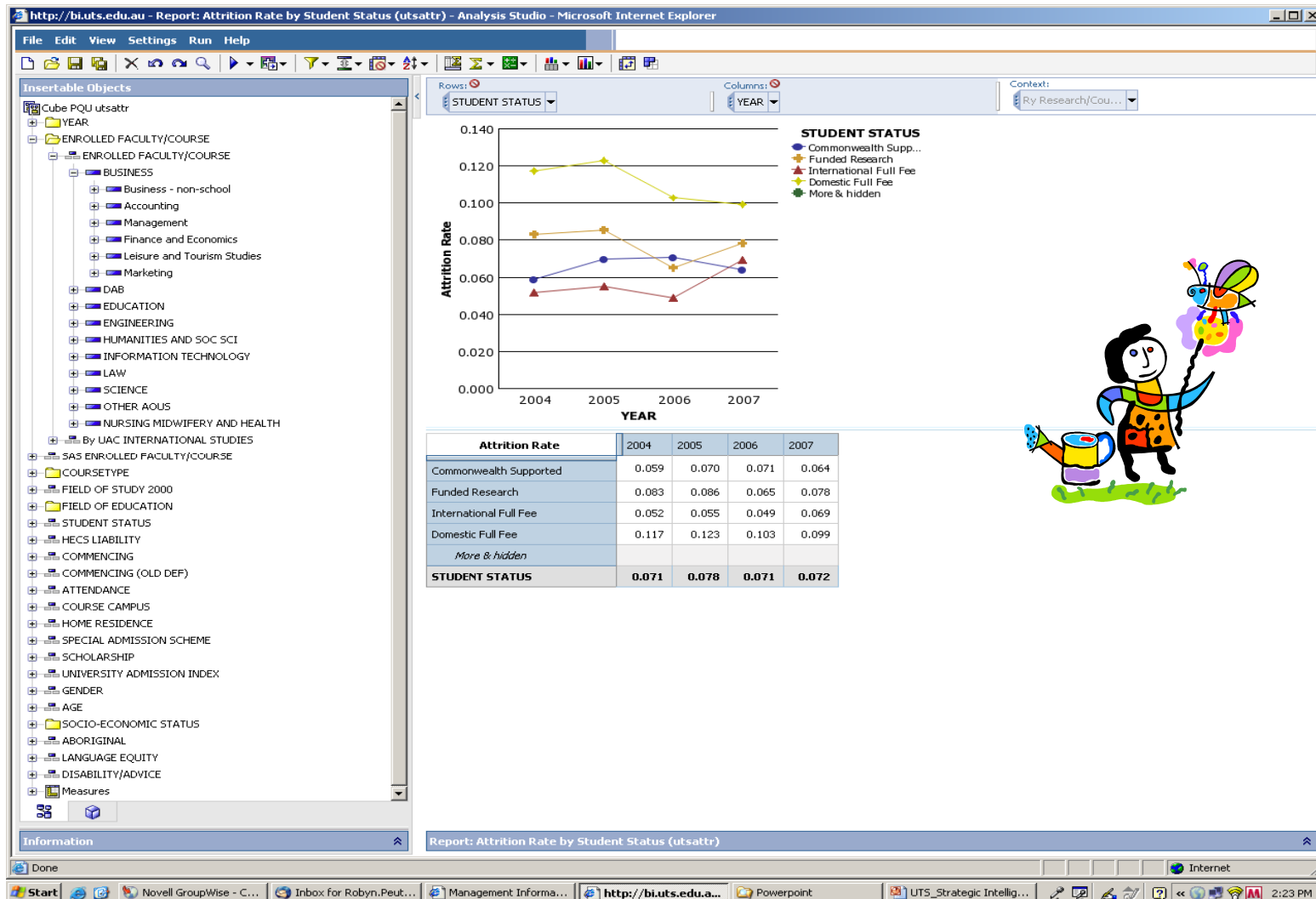
The life cycle of the student



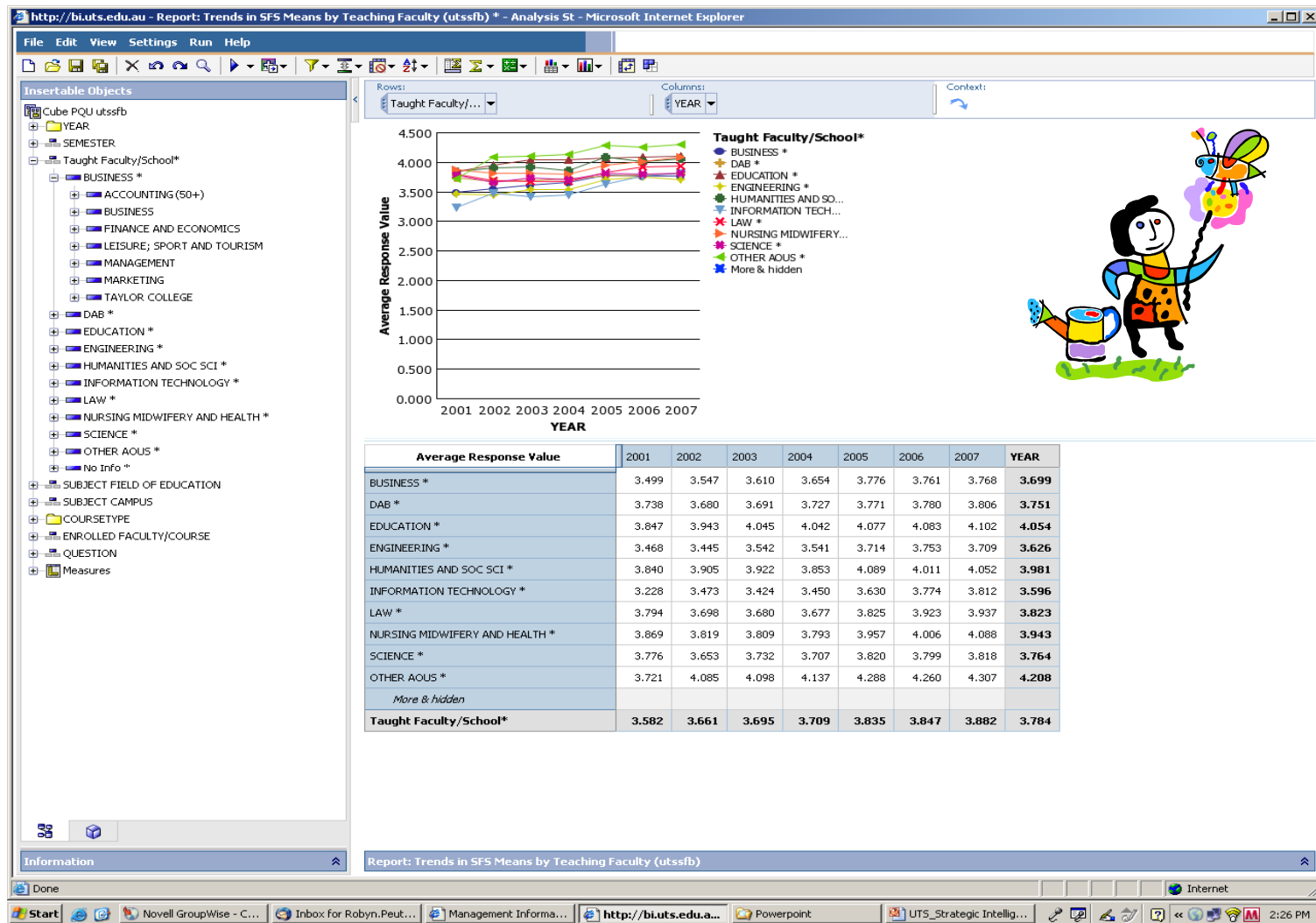
First stage of the student life cycle : applications for UTS courses, monitoring market share



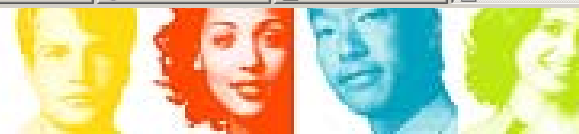
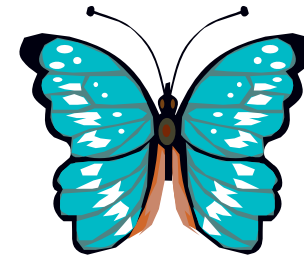
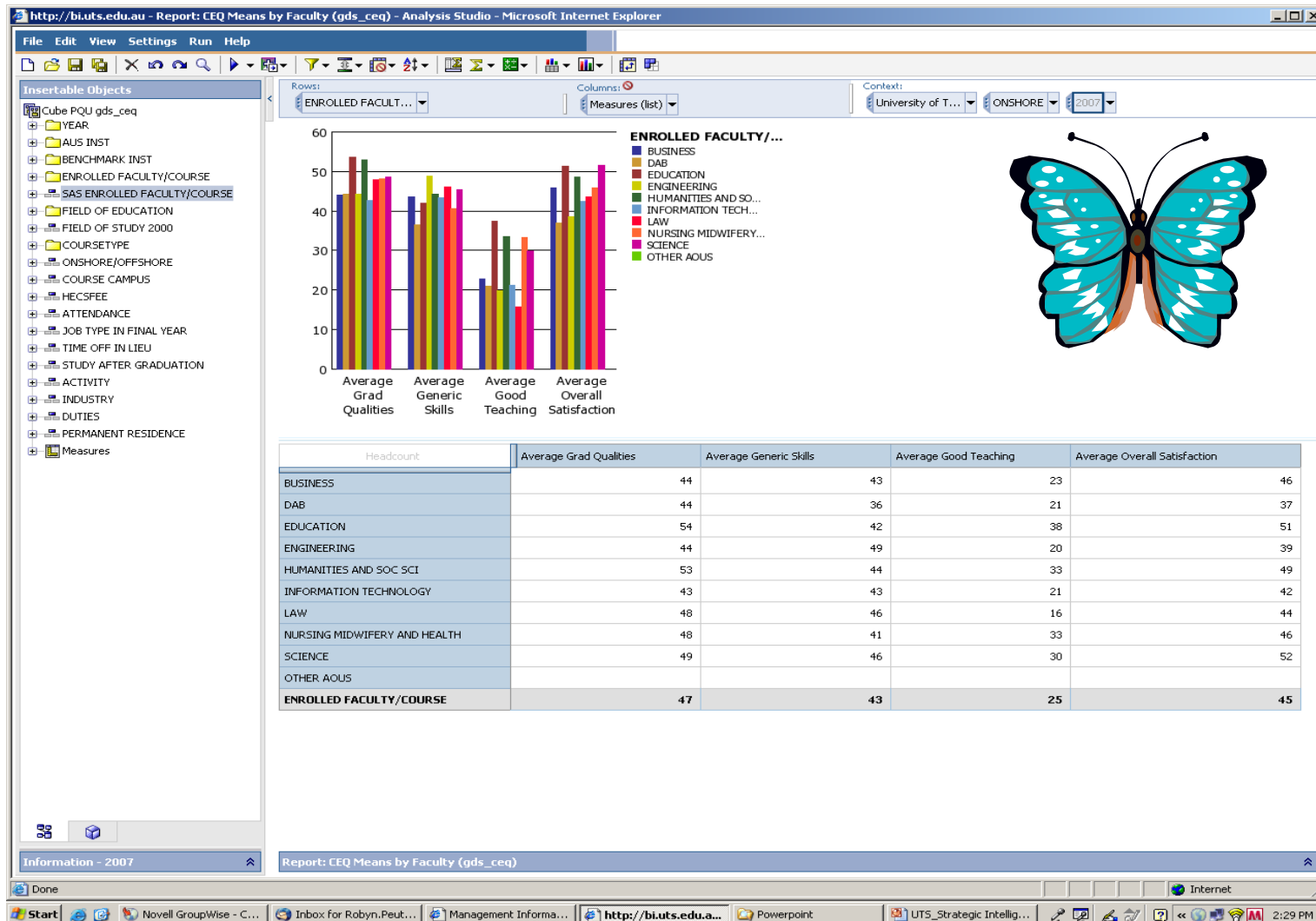
Next stage in the student life cycle : monitoring student attrition and load



Next stage in the student life cycle : monitoring student satisfaction through the course



Final stage in the student life cycle : after they leave UTS, how did they rate their experience?



Final stage in the student life cycle : what are their employment outcomes after they leave UTS?

http://bi.uts.edu.au - Report: Employment by Field of Education (gds_ceq) * - Analysis Studio - Microsoft Internet Explorer

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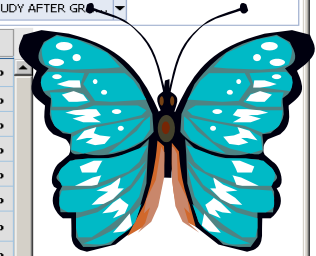
Rows: FIELD OF EDUCAT... Australian Tech... Columns: COURSESTYPE Context: Available for f... 2007 STUDY AFTER GR...

Average % FT Employment		Postgrad	Undergrad	COURSESTYPE
Architecture and Building	University of Technology, Sydney	100.00%	93.33%	96.04%
	Queensland University of Technology	94.23%	97.81%	97.02%
	University of South Australia	70.00%	91.25%	87.00%
	Royal Melbourne Institute of Technology	84.21%	83.33%	83.57%
	Curtin University of Technology	87.50%	95.45%	94.59%
	Australian Technology Network	89.94%	92.87%	92.15%
Creative Arts	University of Technology, Sydney	71.93%	76.72%	75.14%
	Queensland University of Technology	81.82%	79.51%	79.78%
	University of South Australia	90.62%	65.02%	68.24%
	Royal Melbourne Institute of Technology	92.13%	62.42%	72.83%
	Curtin University of Technology	91.67%	68.69%	71.17%
	Australian Technology Network	85.20%	70.72%	73.74%
Education	University of Technology, Sydney	79.70%	70.45%	77.40%
	Queensland University of Technology	91.11%	84.78%	86.44%
	University of South Australia	94.67%	76.60%	79.60%
	Royal Melbourne Institute of Technology	81.13%	92.00%	86.41%
	Curtin University of Technology	87.72%	93.06%	90.70%
	Australian Technology Network	86.57%	82.60%	83.93%
Engineering and Related Technologies	University of Technology, Sydney	96.43%	93.53%	94.01%
	Queensland University of Technology	90.91%	94.05%	93.68%
	University of South Australia	91.67%	81.82%	84.16%
	Royal Melbourne Institute of Technology	80.00%	85.66%	84.71%
	Curtin University of Technology	87.88%	95.26%	94.26%
	Australian Technology Network	87.65%	90.54%	90.09%
Health	University of Technology, Sydney	97.10%	93.64%	94.97%
	Queensland University of Technology	98.68%	95.74%	96.43%
	University of South Australia	98.06%	93.86%	94.46%
	Royal Melbourne Institute of Technology	88.68%	97.85%	95.82%
	Curtin University of Technology	91.18%	92.12%	91.81%
	Australian Technology Network	94.84%	94.36%	94.48%

Information - Australian Technology | Report: Employment by Field of Education (gds_ceq)

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Screen shot of Metrics Studio – the UTS Course Performance Report – the scorecard

Course Performance – Metric Studio – Microsoft Internet Explorer

Address: http://bi.uts.edu.au/cognos8/cgi-bin/cognosisapi.dll

Metric Studio

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Course Performance

Scorecards

ENROLLED FACULTY/COURSE

Scorecards

ENROLLED FACULTY/COURSE

Name	Actual	Target	Variance	Tolerance
OVERALL RATING	-0.06	0.00	-0.06	1.00
UTS DIRECT APPLICATIONS	8,868			
ALL UAC PREFERENCES	49,899			
SELECTED UAC PREFERENCES	24,675			
UAC OFFERS	7,244			
RATIO - UAC PREF 1-3 TO OFFERS	3.4	4.5	-1.1	0.4
STUDENT LOAD	21,762	22,251	-489	2,225
TIMETABLED HOURS / EFTSL	9.9	10.9	-1.0	1.1
STUDENT SUCCESS RATE	91%	92%	-1%	9%
STUDENT ATTRITION RATE	7%	7%	0%	1%
STUDENT SATISFACTION	71%	70%	1%	7%
TOTAL GDS RESPONDENTS	4,307			
AVERAGE SALARY	\$A60,192	\$A56,387	\$A3,804	\$A5,639
FT EMPLOYMENT RATE	87%	87%	-1%	9%
GRADUATE SATISFACTION (MEAN Good Teaching)	26	20	6	20
MEAN GSS (Generic Skills)	33	36	7	20
MEAN OSI (Overall Satisfaction)	35	38	7	20

My Folders

Scorecards

Metric Types

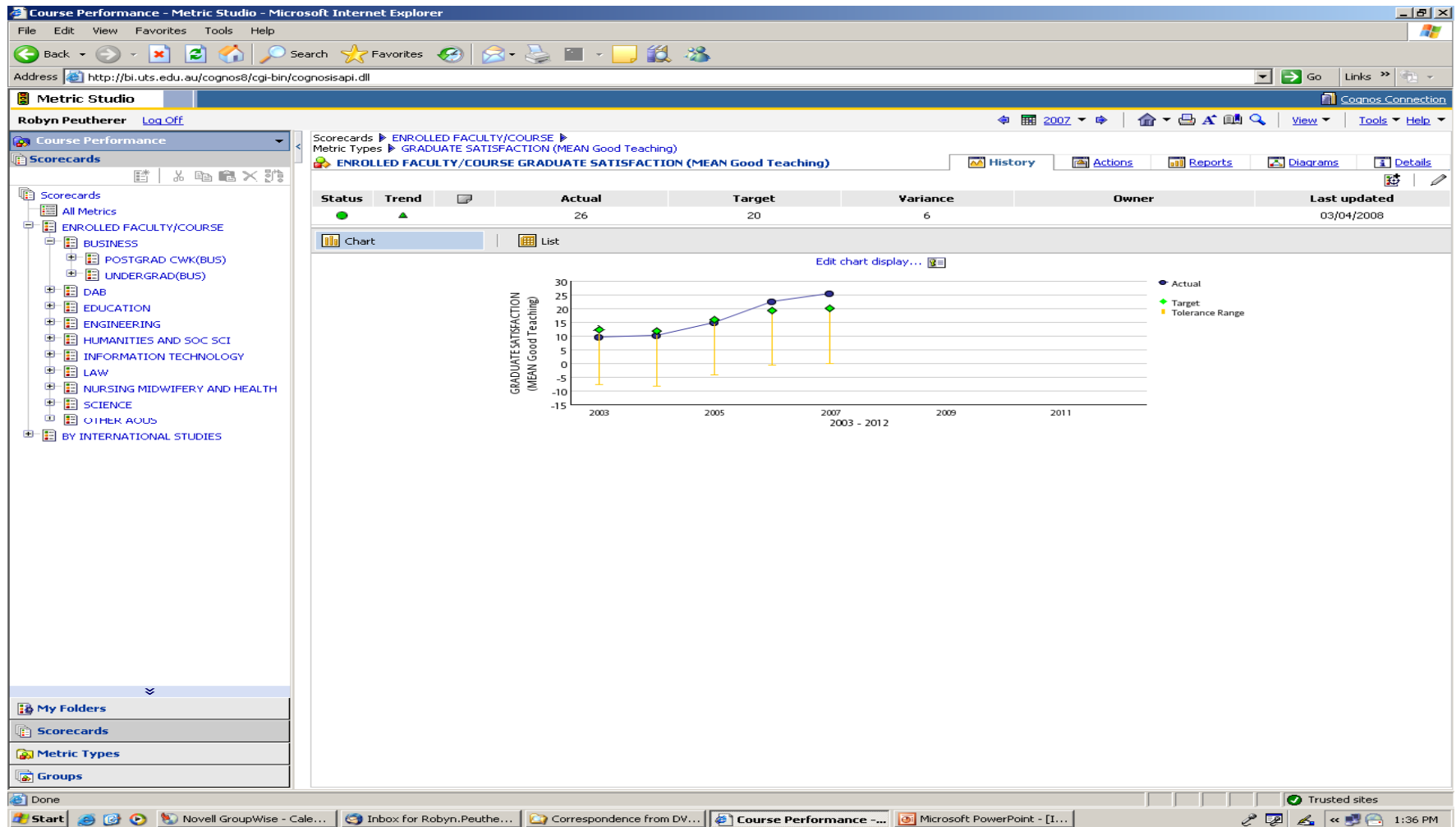
Groups

Trusted sites

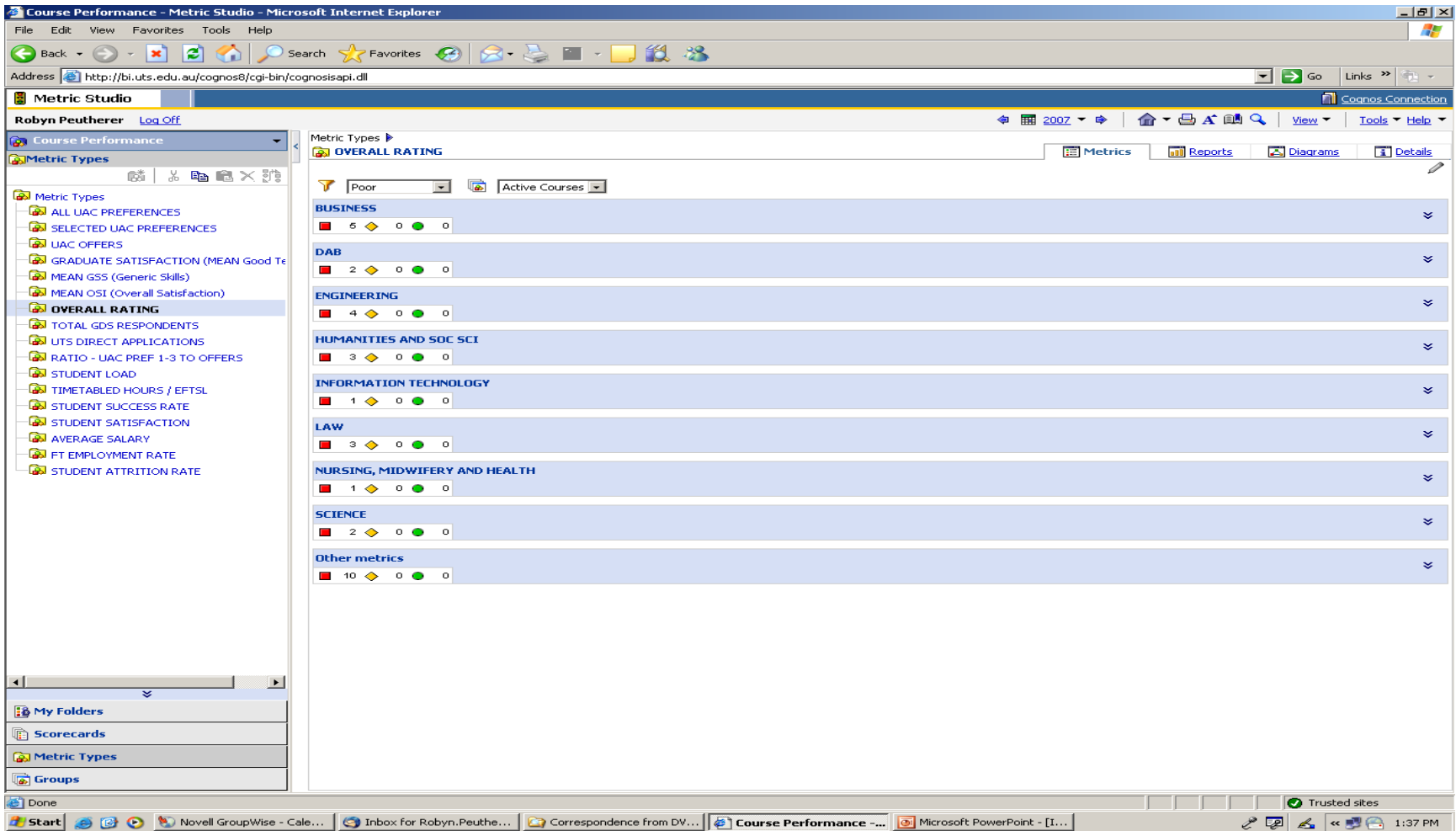
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Screen shot of Metrics Studio – the UTS Course Performance Report – exploring in more depth



Screen shot of Metrics Studio – the UTS Course Performance Report – finding the problem areas



Exploring detail of 'excellent' courses

Course Performance - Metric Studio - Microsoft Internet Explorer

Address: <http://bi.uts.edu.au/cognos8/cgi-bin/cognosisapi.dll>

Metric Studio

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2007

Course Performance

Metric Types

Scorecards: ENROLLED FACULTY/COURSE > NURSING MIDWIFERY AND HEALTH > UNDERGRAD(NMH) > C10122 Bachelor of Nursing

Metric Types: OVERALL RATING

C10122 Bachelor of Nursing OVERALL RATING

Status	Trend	Actual	Target	Variance	Owner	Last updated
	-	0.52	0.00	0.52		03/04/2008

Impact Diagram

C10122 Bachelor of Nursing FT EMPLOYMENT RATE
 C10122 Bachelor of Nursing GRADUATE SATISFACTION (MEAN Good Teaching)
 C10122 Bachelor of Nursing RATIO - UAC PREF 1-3 TO OFFERS
 C10122 Bachelor of Nursing STUDENT ATTRITION RATE
 C10122 Bachelor of Nursing STUDENT SATISFACTION
 C10122 Bachelor of Nursing STUDENT SUCCESS RATE

Metric Types

- ALL UAC PREFERENCES
- SELECTED UAC PREFERENCES
- UAC OFFERS
- GRADUATE SATISFACTION (MEAN Good Te
- MEAN GSS (Generic Skills)
- MEAN OSI (Overall Satisfaction)
- OVERALL RATING
- TOTAL GDS RESPONDENTS
- UTS DIRECT APPLICATIONS
- RATIO - UAC PREF 1-3 TO OFFERS
- STUDENT LOAD
- TIMETABLED HOURS / EFTSL
- STUDENT SUCCESS RATE
- STUDENT SATISFACTION
- AVERAGE SALARY
- FT EMPLOYMENT RATE
- STUDENT ATTRITION RATE



