


AAIR-2009

Student Academic and Learning Perceptions in an Australian University of Technology

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FOCUS

- Factors that affect student performance outcome
- CES – Course Experience Survey 
- Cross tabulated CES & Student Demographic data
Evaluating student satisfaction level on teaching and learning performance (progress rate)

Previous Study & Methodology

1. Learning & Teaching Performance Fund
 - Pass rate as one of key performance indicator for fund allocation (DEEWR, 2009)
2. Using Grade Point Average (GPA) as finer measure of student performance (Dobson and Sharma, 1995)
3. Measurement points:
 - Data captured from CES (Course Experience Survey) semester-1 2008 which compulsory every semester (form → <http://alturl.com/92ik>)
 - Survey population covers 69.1% of the study of University's courses (1,440 number of courses surveyed) with 45,803 student respondent
4. Extract grades data of students who studied in semester-1 2008, recoded, summarized and aggregated by course code
5. Cumulative Grade Point Average (CGPA) calculation:
The sum of grades / Number of courses

Result

- Student Performance and Demographics Variables

Variable	Correlation with Pass Rate	Statistical Significance
% Full-time	0.019	$p > 0.05$
% Part-time	-0.019	$p > 0.05$
% < 25 Years	-0.067	$p < 0.05$
% ≥ 25 Years	0.067	$p < 0.05$
% International	0.036	$p > 0.05$
% Domestic	-0.036	$p > 0.05$
% 4 hours or less study per week	-0.063	$p < 0.05$
% > 4 hours study	+0.063	$p < 0.05$

Result - Continued

Table 2: Course Experience Survey Outcomes and Student Performance

Question	Mean Percentage Agreement		
	Pass Rate <85%	Pass Rate ≥85%	% Difference
Learning objectives in course clear	73.47	74.70	1.67
Learning what I expected	71.58	72.43	1.19
Course is well-organised	69.57	68.41	-1.67
Lecturers extremely good at explaining things	68.80	71.54	3.98
Teaching staff gave helpful feedback	56.97	63.46	11.39
Course contributes to confidence in tackling unfamiliar problems	59.85	64.20	7.27
Assessment tasks require demonstration of what learned	76.89	77.58	0.90
Work required in course about right	70.51	72.93	3.43
Teaching staff motivate me to do my best work	60.83	66.80	9.81
Enjoy doing the work for this course	61.55	66.78	8.50
Find learning resources for this course useful	68.52	68.43	-0.13
Web-based materials for course effective for learning	59.62	56.15	-5.82
Effective use of computer-based teaching materials	54.39	53.39	-1.84
Facilities are adequate	73.84	70.76	-4.17
Feel I can actively participate in classes	70.16	75.41	7.48
Good balance of theory and practice	64.55	66.77	3.44
Teaching staff work hard to make course interesting	68.97	73.96	7.24
Can use what I am learning in course in my career	70.23	74.90	6.65
Staff made real effort to understand difficulties I'm having with work	58.31	65.57	12.45
Staff put lot of time in commenting on my work	48.58	56.57	16.45
Overall satisfaction with course	68.69	71.32	3.83

Result - Continued

Table 3: Correlation Between Course Experience Survey Outcomes and Student Performance

	Pearson Correlation	N
Good Teaching Scale	0.147	1319
Learning objectives in course clear	0.030	1320
Learning what I expected	0.056	1321
Course is well-organised	0.001	1321
Lecturers extremely good at explaining things	0.064	1320
Teaching staff gave helpful feedback	0.119	1321
Course contributes to confidence in tackling unfamiliar problems	0.118	1321
Assessment tasks require demonstration of what learned	0.030	1321
Work required in course about right	0.041	1320
Teaching staff motivate me to do my best work	0.112	1321
Enjoy doing the work for this course	0.128	1321
Find learning resources for this course useful	-0.013	1321
Web-based materials for course effective for learning	-0.048	1302
Effective use of computer-based teaching materials	-0.005	1290
Facilities are adequate	-0.070	1321
Feel I can actively participate in classes	0.147	1321
Good balance of theory and practice	0.052	1321
Teaching staff work hard to make course interesting	0.112	1321
Can use what I am learning in course in my career	0.116	1320
Staff made real effort to understand difficulties I'm having with work	0.146	1321
Staff put lot of time in commenting on my work	0.159	1320
Overall satisfaction with course	0.059	1321

* Significant at $p < 0.05$ **Significant at $p < 0.01$

Conclusion

- Students spending more out of class time, perform better than their counterparts.
- Academic staff have major role in terms of student performance
- Further research & studies required to investigate student pass rate that tend to improve with age

Questions & Answer

- Any questions?
- Thank you for your attentions

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