

# Questionable Work Practices

## The Views of Undergraduate Students in IT Courses

Judy Sheard, Martin Dick, Selby Markham

February 2001

### Introduction

This is a report on a study that aimed to determine attitudes towards questionable work practices of postgraduate and graduate diploma students within the School of Computer Science and Software Engineering (CSSE). This is part of a wider project which proposes to:

- establish undergraduate and graduate students' understanding of what constitutes cheating and plagiarism, and what practices are acceptable to them in this context
- determine the extent of cheating and plagiarism amongst undergraduate and postgraduate students
- identify motivations for cheating and plagiarism, and factors that influence cheating behaviour
- suggest measures which may be taken to discourage the practice of cheating and plagiarism

The longer-term aim of the project is to assist in determining measures that can be taken to address this problem and will facilitate the development of an informed policy on student plagiarism and cheating.

### Research Method

Selected undergraduate subjects from each year level of CSSE undergraduate courses were surveyed near the end of second semester 2000. A paper questionnaire was given to the students in their tutorial classes. The questionnaire contained questions to determine:

- demographic information
- students' rating of the acceptability of various questionable work practices described in 18 different scenarios
- students' practice and knowledge of others practising each questionable work practice
- reasons which could cause cheating
- reasons which could prevent cheating

### Questionable work practice scenarios

A brief description of the questionable work practice scenarios is as follows:

1. Two students collaborating on an assignment meant to be completed individually
2. Posting to an Internet newsgroup for assistance
3. Showing assignment work to a lecturer for guidance
4. Resubmitting an assignment from a previous subject in a new subject.

5. Submitting a friend's assignment from a past running of the subject
6. Being given the answer to a tutorial exercise worth 5% by a class mate if the computer you used has problems
7. Hiring a person to write your assignment for you
8. Copying another student's assignment from their computer without their knowledge and submitting it
9. Not informing the tutor, that an assignment has been given too high a mark
10. Taking a student's assignment from a lecturer's pigeonhole and copying it
11. Copying material for an essay from the Internet
12. Copying the majority of an assignment from a friend's assignment, but doing a fair bit of work yourself
13. Copying all of an assignment given to you by a friend
14. Hiring someone to sit an exam for you
15. Using a hidden sheet of paper with important facts during an exam
16. Obtaining a medical certificate from a doctor to get an extension, when you are not sick
17. Copying material for an essay from a text book
18. Swapping assignments with a friend, so that each does one assignment, instead of doing both.

A copy of the Questionable Work Practices survey form can be found at:  
<http://cerg.csse.monash.edu.au/reports/>

## Demographic Profile

504 valid questionnaires were returned from 1037 students. Thirteen of these questionnaires were from postgraduate students and these have not been included in the analysis of this data.

The students surveyed were enrolled in the undergraduate subjects CSE1203, CSE2203, CSE3200, CSE1434 and CSE2302

The following tables show the numbers of student classified according to categories used in the analysis of the results from the surveys. NR is used to indicate no response was given to this question.

### Numbers of students classified by campus

<b>Caulfield</b>	<b>Clayton</b>
302	189

**Numbers of students classified by subject**

<b>Subject</b>	<b>Completed questionnaires</b>	<b>Number of students surveyed</b>
<b>CSE1203</b>	139	279
<b>CSE2203</b>	117	201
<b>CSE3200</b>	46	114
<b>CSE1434</b>	89	211
<b>CSE2302</b>	100	232
<b>Total</b>	491	1037

**Numbers of students classified by year of course**

<b>1<sup>st</sup> year</b>	<b>2<sup>nd</sup> year</b>	<b>3<sup>rd</sup> year</b>	<b>Other</b>	<b>NR</b>
152	218	107	1	13 (2.6%)

**Numbers of students classified by study mode**

<b>Full time</b>	<b>Part time</b>	<b>NR</b>
427	17	47 (9.6%)

**Numbers of students classified by fee status**

<b>Full fee paying</b>	<b>HECS</b>	<b>Other</b>	<b>NR</b>
200	229	5	57 (11.6%)

**Numbers of students classified by gender**

<b>Male</b>	<b>Female</b>	<b>NR</b>
305	135	48 (9.8%)

### Numbers of students classified by age

The students were classified into 2 age groups as follows:

- born during 1980 or after (younger group)
- born before 1980 (older group)

<b>Year of birth <math>\geq</math> 1980 (young)</b>	<b>Year of birth <math>&lt;</math> 1980 (old)</b>	<b>NR</b>
232	180	79 (16.1%)

### Numbers of students classified by average performance in course to date

<b>Fail</b>	<b>Pass</b>	<b>Credit</b>	<b>Distinction</b>	<b>High Distinction</b>	<b>NR</b>
7	39	162	169	64	50 (10.2%)

From the above data the students were further classified into low performance (fail, pass, credit) and high performance (distinction, high distinction).

<b>Low performance</b>	<b>High performance</b>	<b>NR (%)</b>
208	233	50 (10.2%)

## Survey Results

### Questionable work practice scenarios

#### Student ratings of acceptability of scenarios and extent of practise of the scenarios

The students were asked to consider 18 different scenarios, each describing a questionable work practice. For each scenario they were asked to rate how acceptable the practice was, whether they had done it, and whether they personally knew someone who had done it. For the ratings of acceptability a 5-point Likert scale was used, where 1 indicates acceptable and 5 indicates not acceptable. The results are shown in the table below. NR is used to indicate no response was given to the question. The “Acceptable” column shows the percentage of students who rated the scenario as acceptable (1 or 2 on the Likert scale).

Scenario	Acceptability					Practised personally		Know someone personally	
	Acceptable %	Mean	SD	NR %		Yes %	NR %	Yes %	NR %
1	48.0	2.6	1.2	1.2		46.8	2.0	67.4	2.4
2	69.5	2.0	1.1	1.0		23.2	2.2	36.9	1.8
3	69.3	2.1	1.1	1.2		35.2	2.0	53.4	2.2
4	51.0	2.6	1.3	1.0		28.2	1.8	38.1	1.8
5	36.2	3.1	1.3	0.8		28.7	1.4	44.0	2.0
6	13.8	3.9	1.2	1.0		10.6	1.6	32.2	1.6
7	4.0	4.5	0.9	1.0	*	3.1	1.8	10.8	1.8
8	4.6	4.3	1.0	1.4		6.9	2.0	21.4	2.0
9	32.2	3.1	1.4	1.4		17.5	2.4	26.3	2.4
10	2.4	4.7	0.7	1.8	*	2.9	2.0	4.1	2.0
11	10.9	3.7	1.1	1.6		18.9	2.2	27.9	2.2
12	33.4	3.0	1.2	2.0		30.5	3.1	45.6	2.9
13	5.9	4.4	1.0	2.0	*	8.6	2.9	27.9	3.1
14	2.4	4.7	0.8	2.0	*	2.9	2.9	4.3	2.9
15	2.6	4.6	0.8	2.0	*	3.7	2.6	13.2	2.6
16	9.9	4.0	1.1	1.8		10.6	2.4	33.8	2.4
17	12.0	3.9	1.1	1.6		19.6	2.9	30.1	2.9
18	8.5	4.1	1.1	2.4		8.1	2.6	20.2	2.6

\* indicates that results were skewed ( $< -2.0$  or  $> 2.0$ ) and/or had high kurtosis

#### Acceptable scenarios

The most acceptable scenarios were 2 and 3. These presented situations where students obtained low level assistance with assignment work.

Other acceptable scenarios (in decreasing order of acceptability) were:

- 1 (two students collaborating on an assignment meant to be completed individually)
- 4 (resubmitting an assignment from a previous subject for assessment in a new subject)
- 12 (copying the majority of an assignment from a friend's assignment, but doing a fair bit of work yourself)
- 5 (submitting a friend's assignment from a past running of the subject)
- 9 (discovering that an assignment mark was added up incorrectly to give a higher mark, and not telling the tutor)

All of the above scenarios were significantly more acceptable than the others.

### **Unacceptable scenarios**

The least acceptable scenarios were 10 (theft of an assignment from a lecturer's pigeonhole) and 14 (exam cheating).

Other unacceptable scenarios (in increasing order of acceptability) were:

- 15 (using a hidden sheet of paper with important facts during an exam)
- 7 (hiring a person to write your assignment for you)
- 13 (copying all of an assignment given to you by a friend)
- 8 (copying another student's assignment from their computer without their knowledge and submitting it)

### **Most practised scenarios**

The scenarios describing work practices which the highest numbers of students admitted to having done were:

- 1 (two students collaborating on an assignment meant to be completed individually)
- 3 (showing assignment work to a lecturer for guidance)
- 12 (copying the majority of an assignment from a friend's assignment, but doing a fair bit of work yourself)
- 5 (submitting a friend's assignment from a past running of the subject)
- 4 (resubmitting an assignment from a previous subject for assessment in a new subject)

All of these scenarios were rated in the top seven most acceptable scenarios.

These were also the scenarios which the highest numbers of students admitted to having known someone personally who had done them.

### **Least practised scenarios**

The scenarios describing work practices which the least numbers of students admitted to having done were:

- 14 (hiring someone to sit an exam for you)

- 10 (taking a student's assignment from a lecturer's pigeonhole and copying it)
- 7 (hiring a person to write your assignment for you)
- 15 (using a hidden sheet of paper with important facts during an exam)
- 8 (copying another student's assignment from their computer without their knowledge and submitting it)
- 18 (swapping assignments with a friend, so that each does one assignment, instead of doing both)
- 13 (copying all of an assignment given to you by a friend)

These scenarios were also all rated as highly unacceptable.

The scenarios describing work practices which the least numbers of students admitted to having known someone personally who had done it were:

- 10 (taking a student's assignment from a lecturer's pigeonhole and copying it)
- 14 (hiring someone to sit an exam for you)
- 7 (hiring a person to write your assignment for you)
- 15 (using a hidden sheet of paper with important facts during an exam)

### **Differences in acceptability ratings between groups**

For each scenario the following tests were performed to determine differences in the means of acceptability ratings for various groups:

- ANOVAs were performed to determine any differences ( $p \leq 0.05$ ) in the means obtained for the students' ratings of acceptability of scenarios when classified according to:
  - subject group
  - year of the course
- Independent groups  $t$ -tests were used to determine any significant differences ( $p \leq 0.05$ ) in the means obtained for the students' ratings of the acceptability of scenarios when classified according to:
  - campus of study
  - study mode (fulltime or part time)
  - fee status (full fee paying or HECS)
  - gender
  - age group
  - average course performance to date (low or high)

The ANOVAs and  $t$ -tests were not performed on scenarios 7, 10, 13, 14 and 15 because the distributions for these scenarios had too high or too low kurtosis. The following results were obtained. Only the significant results are presented and as the non responses were never greater than 4%, these have also not been shown.

*Scenarios showing a significant difference\* in acceptability ratings across subject groups*

Scenario	Acceptability									
	CSE1203		CSE2203		CSE3200		CSE1434		CSE2302	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
<b>4</b>	2.6	1.4	3.0	1.3	2.9	1.3	2.4	1.3	<b>2.2</b>	1.2
<b>5</b>	2.8	1.4	3.0	1.2	<b>2.6</b>	1.3	3.4	1.2	3.4	1.3
<b>6</b>	3.8	1.3	3.8	1.2	<b>3.5</b>	1.1	4.0	1.0	4.1	1.0
<b>8</b>	<b>4.1</b>	1.1	4.2	1.0	<b>4.1</b>	1.0	4.5	0.7	4.5	0.9
<b>18</b>	<b>3.9</b>	1.2	4.0	1.2	<b>3.9</b>	1.0	4.2	1.0	4.4	0.9

\* results were significant at the  $p \leq 0.05$  level for an ANOVA test

*Scenarios showing a significant difference\* in acceptability ratings between students classified according to campus of study*

Scenario	Acceptability			
	Caulfield		Clayton	
	Mean	SD	Mean	SD
<b>4</b>	2.8	1.4	<b>2.3</b>	1.2
<b>5</b>	<b>2.9</b>	1.3	3.4	1.2
<b>6</b>	<b>3.7</b>	1.3	4.0	1.0
<b>8</b>	<b>4.1</b>	1.0	4.5	0.8
<b>17</b>	<b>3.8</b>	1.1	4.0	1.0
<b>18</b>	<b>4.0</b>	1.2	4.3	0.9

\* results were significant at the  $p \leq 0.05$  level for a *t*-test

*Scenario showing a significant difference\* in acceptability ratings across year of course*

Scenario	Acceptability					
	1 <sup>st</sup> year		2 <sup>nd</sup> year		3 <sup>rd</sup> year	
	Mean	SD	Mean	SD	Mean	SD
<b>5</b>	3.1	1.4	3.3	1.3	<b>2.7</b>	1.3

\* indicates that results were significant at the  $p \leq 0.05$  level

*Scenarios showing a significant difference\* in acceptability ratings between students classified according to study mode (fulltime or part time)*

Scenario	Acceptability			
	Full time		Part time	
	Mean	SD	Mean	SD
<b>1</b>	<b>2.6</b>	1.2	3.4	1.3
<b>5</b>	<b>3.1</b>	1.3	3.8	1.2

\* results were significant at the  $p \leq 0.05$  level for a *t*-test

*Scenarios showing a significant difference\* in acceptability ratings between students classified according to fee status (full fee paying or HECS)*

Scenario	Acceptability			
	Full fee paying		HECS	
	Mean	SD	Mean	SD
<b>1</b>	<b>2.4</b>	1.1	2.8	1.2
<b>4</b>	2.8	1.3	<b>2.4</b>	1.3
<b>5</b>	<b>2.7</b>	1.3	3.4	1.3
<b>6</b>	<b>3.7</b>	1.2	4.0	1.1
<b>8</b>	<b>4.1</b>	1.1	4.4	0.9
<b>9</b>	3.2	1.3	<b>2.9</b>	1.4
<b>11</b>	<b>3.7</b>	1.2	4.0	1.1
<b>17</b>	<b>3.7</b>	1.1	4.0	1.1
<b>18</b>	<b>3.8</b>	1.2	4.2	1.1

\* results were significant at the  $p \leq 0.05$  level for a *t*-test

*Scenarios showing a significant difference\* in acceptability ratings between students classified according to gender*

Scenario	Acceptability			
	Male		Female	
	Mean	SD	Mean	SD
<b>9</b>	<b>2.9</b>	1.4	3.3	1.3
<b>11</b>	<b>3.8</b>	1.1	4.1	1.0

\* results were significant at the  $p \leq 0.05$  level for a *t*-test

*Scenarios showing a significant difference\* in acceptability ratings between students classified according to age*

Scenario	Acceptability			
	Younger group		Older group	
	Mean	SD	Mean	SD
<b>4</b>	2.5	1.3	2.8	1.4
* results were significant at the $p \leq 0.05$ level for a <i>t</i> -test				

*Differences in acceptability ratings between students classified according to average course performance to date (low or high).*

Scenario	Acceptability			
	Low performance		High performance	
	Mean	SD	Mean	SD
<b>12</b>	2.9	1.1	3.1	1.2
<b>17</b>	3.7	1.1	3.9	1.1
<b>18</b>	3.9	1.2	4.2	1.0
* results were significant at the $p \leq 0.05$ level for a <i>t</i> -test				

### **Differences between groups in admissions of cheating and knowledge of others cheating**

For each scenario cross tabulations were performed to determine differences between groups for numbers of students admitting to practising the scenario or knowing someone personally who has practised the scenario. The non responses were never greater than 3% and these have not been shown. Note that only the significant results have been shown.

*Differences in admissions of cheating and knowledge of others cheating between students classified according to campus of study*

Scenario	Practised this scenario personally %		Know someone personally who has practised this scenario %	
	Caulfield	Clayton	Caulfield	Clayton
<b>1</b>	44.2	<b>53.5</b>	65.9	<b>74.5</b>
<b>2</b>	<b>28.1</b>	17.0	<b>41.2</b>	31.9
<b>3</b>			<b>59.0</b>	47.6
<b>5</b>	<b>34.9</b>	19.9	<b>50.2</b>	36.6
<b>6</b>	8.4	<b>14.5</b>	27.6	<b>40.9</b>
<b>7</b>			<b>13.1</b>	7.6
<b>8</b>			<b>27.5</b>	12.6
<b>10</b>	<b>4.7</b>	0		
<b>11</b>	<b>23.9</b>	12.0		
<b>13</b>	<b>11.6</b>	4.4		
<b>14</b>	<b>4.4</b>	0.6		
<b>15</b>	<b>5.4</b>	1.1		
<b>17</b>	<b>23.0</b>	16.0		
<b>18</b>			<b>23.3</b>	16.5

\* results were significant at the  $p \leq 0.05$  level for a Chi-square test

*Differences in admissions of cheating and differences in knowledge of others cheating, between students classified according to year of course*

Scenario	Practised this scenario personally %			Know someone personally who has practised this scenario %		
	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year
<b>2</b>				41.9	30.7	<b>44.8</b>
<b>3</b>				43.0	54.5	<b>70.2</b>
<b>4</b>	32.4	22.8	<b>36.5</b>	40.3	31.8	<b>52.9</b>
<b>5</b>	20.7	23.8	<b>48.6</b>	35.3	42.3	<b>62.1</b>
<b>9</b>	<b>25.7</b>	15.6	14.3	34.9	20.9	

\* results were significant at the  $p \leq 0.05$  level for a Chi-square test

*Differences in admissions of cheating and differences in knowledge of others cheating, between students classified according to study mode (fulltime or part time)*

Scenario	Practised this scenario personally %		Know someone personally who has practised this scenario %	
	Full time	Part time	Full time	Part time
<b>1</b>	<b>49.3</b>	25.0	<b>71.3</b>	47.1
<b>6</b>			<b>34.8</b>	11.8
<b>9</b>	<b>19.4</b>	0		
<b>12</b>			<b>50.2</b>	23.5
<b>16</b>			<b>37.3</b>	0

\* results were significant at the  $p \leq 0.05$  level for a Chi-square test

*Differences in admissions of cheating and differences in knowledge of others cheating, between students classified according to fee status (full fee paying or HECS)*

Scenario	Practised this scenario personally %		Know someone personally who has practised this scenario %	
	Full fee paying	HECS	Full fee paying	HECS
<b>1</b>			64.6	<b>75.7</b>
<b>2</b>	<b>32.0</b>	17.2		
<b>5</b>	<b>37.1</b>	20.5		
<b>6</b>			24.7	<b>42.8</b>
<b>7</b>			<b>18.0</b>	7.0
<b>13</b>			25.4	<b>33.3</b>
<b>18</b>	<b>13.1</b>	5.3		

\* results were significant at the  $p \leq 0.05$  level for a Chi-square test

*Differences in admissions of cheating and differences in knowledge of others cheating, between students classified according to gender*

Scenario	Practised this scenario personally %		Know someone personally who has practised this scenario %	
	Male	Female	Male	Female
<b>5</b>	24.7	<b>37.3</b>		
<b>11</b>	<b>22.7</b>	12.6	<b>32.3</b>	20.7
<b>18</b>	<b>11.0</b>	3.1		

\* results were significant at the  $p \leq 0.05$  level for a Chi-square test

*Differences in admissions of cheating and differences in knowledge of others cheating, between students classified according to age group*

Scenario	Practised this scenario personally %		Know someone personally who has practised this scenario %	
	Young	Old	Young	Old
<b>1</b>	<b>57.6</b>	37.3	<b>75.2</b>	64.2
<b>3</b>	31.0	<b>43.1</b>	48.2	<b>61.0</b>

\* results were significant at the  $p \leq 0.05$  level for a Chi-square test

*Differences in admissions of cheating and differences in knowledge of others cheating, between students classified according to average course performance to date (low or high)*

Scenario	Practised this scenario personally %		Know someone personally who has practised this scenario %	
	Low	High	Low	High
<b>6</b>	<b>39.9</b>	25.8		
<b>7</b>			<b>42.5</b>	27.2
<b>18</b>	74.3	<b>89.5</b>		

\* results were significant at the  $p \leq 0.05$  level for a Chi-square test

## Reasons for cheating

For this questions students were asked to indicate the likelihood that each reason would cause them to cheat. A 5-point Likert scale was used, where 1 indicates not at all and 5 indicates highly likely. NR is used to indicate no response was given to the question.

Reason	Likelihood of causing cheating		
	Mean	SD	NR %
Not enough time	3.1	1.5	3.2
Too great a workload at university	3.0	1.4	3.4
Will fail otherwise	3.1	1.4	4.2
Lazy	2.0	1.2	4.2
Everyone does it	2.0	1.2	3.6
Need to get better marks	2.2	1.3	4.2
Parental pressure	2.0	1.3	4.0
Can't afford to fail	2.7	1.4	4.4
Assignments are too hard	2.7	1.4	4.0
To help a friend	2.5	1.2	3.8
Missed classes due to ill health	2.4	1.3	4.0
Exams for the subject are too hard	2.5	1.4	4.8
Afraid of failing	2.7	1.4	4.4
For a monetary or other reward	1.8	1.4	4.4
* indicates that results were skewed (< -2.0 or >2.0) and/or had high kurtosis			

The following tests were performed to determine any differences in the means for the students' ratings of the likelihood of each reason causing cheating:

- ANOVAs were performed to determine differences ( $p \leq 0.05$ ) in the means obtained for the ratings of the likelihood of each reason causing cheating when classified according to:
  - subject group
  - year of the course
- Independent groups *t*-tests were used to determine any significant differences ( $p \leq 0.05$ ) in the means obtained for the ratings of the likelihood of each reason causing cheating when classified according to:
  - campus of study
  - study mode (fulltime or part time)
  - fee status (full fee paying or HECS)

- gender
- age group
- average course performance to date (low or high)

The following results were obtained. Significant results are presented only. The non responses were never greater than 5% and these have not been shown.

There were no significant differences in the likelihood of any reason causing cheating across subject groups or year of course.

*Scenarios showing a significant difference\* in the likelihood of causing cheating ratings between students classified according to campus of study*

Reason	Likelihood of causing cheating			
	Caulfield		Clayton	
	Mean	SD	Mean	SD
<b>Too great a workload at university</b>	3.1	1.4	2.9	1.4
<b>Parental pressure</b>	2.1	1.3	1.8	1.2
<b>Assignments are too hard</b>	2.9	1.4	2.6	1.4
<b>For a monetary or other reward</b>	1.9	1.3	1.6	1.0

\* results were significant at the  $p \leq 0.05$  level for a *t*-test

*Scenarios showing a significant difference\* in the likelihood of causing cheating ratings between students classified according to study mode (fulltime or part time)*

Reason	Likelihood of causing cheating			
	Full time		Part time	
	Mean	SD	Mean	SD
<b>Exams for the subject are too hard</b>	2.5	1.4	1.8	1.1
<b>Afraid of failing</b>	2.7	1.4	2.0	1.3
<b>For a monetary or other reward</b>	1.9	1.2	1.1	0.3

\* results were significant at the  $p \leq 0.05$  level for a *t*-test

*Scenarios showing a significant difference\* in the likelihood of causing cheating ratings between students classified according to fee status (full fee paying or HECS)*

Reason	Likelihood of causing cheating			
	Full fee paying		HECS	
	Mean	SD	Mean	SD
<b>Too great a workload at university</b>	<b>3.3</b>	1.4	2.9	1.4
<b>Will fail otherwise</b>	2.9	1.4	<b>3.3</b>	1.4
<b>Everyone does it</b>	<b>2.2</b>	1.3	1.8	1.2
<b>Need to get better marks</b>	<b>2.5</b>	1.4	2.0	1.2
<b>Parental pressure</b>	<b>2.3</b>	1.3	1.7	1.2
<b>Can't afford to fail</b>	<b>2.9</b>	1.5	2.6	1.4
<b>Assignments are too hard</b>	<b>3.2</b>	1.4	2.4	1.3
<b>Missed classes due to ill health</b>	<b>2.5</b>	1.4	2.2	1.3
<b>Exams for the subject are too hard</b>	<b>2.9</b>	1.5	2.2	1.3
<b>Afraid of failing</b>	<b>3.0</b>	1.5	2.4	1.4
<b>For a monetary or other reward</b>	<b>2.0</b>	1.3	1.7	1.2

\* results were significant at the  $p \leq 0.05$  level for a *t*-test

*Scenarios showing a significant difference\* in the likelihood of causing cheating ratings between students classified according to gender*

Reason	Likelihood of causing cheating			
	Male		Female	
	Mean	SD	Mean	SD
<b>Everyone does it</b>	<b>2.1</b>	1.3	1.8	1.1
<b>Can't afford to fail</b>	<b>2.9</b>	1.4	2.5	1.5
<b>To help a friend</b>	<b>2.7</b>	1.3	2.3	1.1
<b>For a monetary or other reward</b>	<b>2.0</b>	1.3	1.5	0.9

\* results were significant at the  $p \leq 0.05$  level for a *t*-test

*Scenarios showing a significant difference\* in the likelihood of causing cheating ratings between students classified according to age*

Reason	Likelihood of causing cheating			
	Younger group		Older group	
	Mean	SD	Mean	SD
Parental pressure	1.8	1.2	2.1	1.4
Assignments are too hard	2.6	1.4	3.0	1.4
Missed classes due to ill health	2.3	1.3	2.6	1.4
Exams for the subject are too hard	2.4	1.4	1.7	1.4
* results were significant at the $p \leq 0.05$ level for a <i>t</i> -test				

*Scenarios showing a significant difference\* in the likelihood of causing cheating ratings between students classified according to average course performance to date (low or high).*

Reason	Likelihood of causing cheating			
	Low performance		High performance	
	Mean	SD	Mean	SD
Not enough time	3.3	1.4	3.0	1.5
Too great a workload at university	3.2	1.4	2.9	1.4
Will fail otherwise	3.3	1.3	2.9	1.5
Lazy	2.3	1.3	1.8	1.1
Everyone does it	2.1	1.3	1.8	1.2
Need to get better marks	2.3	1.3	2.1	1.2
Parental pressure	2.2	1.3	1.8	1.2
Can't afford to fail	3.0	1.4	2.6	1.4
Assignments are too hard	3.0	1.4	2.5	1.3
To help a friend	2.7	1.2	2.4	1.3
Exams for the subject are too hard	2.7	1.4	2.3	1.4
Afraid of failing	2.9	1.4	2.5	1.4
* results were significant at the $p \leq 0.05$ level for a <i>t</i> -test				

## Reasons for not cheating

For this questions students were asked to indicate the likelihood that each reason would prevent them from cheating. A 5-point Likert scale was used, where 1 indicates not at all and 5 indicates highly likely. NR is used to indicate no response was given to the question.

Reason	Likelihood of preventing cheating		
	Mean	SD	NR %
<b>Want to know what your work is worth</b>	4.1	1.2	4.7
<b>Pride in your work</b>	4.1	1.1	5.1
<b>Can get good marks without cheating</b>	4.0	1.0	3.9
<b>Against your moral values</b>	3.8	1.2	4.9
<b>Against your religious beliefs</b>	2.7	1.6	5.7
<b>Fear of being found out</b>	3.4	1.4	5.3
<b>Never thought about it</b>	3.1	1.4	5.9
<b>Don't know how to</b>	2.7	1.4	5.1
<b>Fairness to other students</b>	3.1	1.4	4.5
<b>Penalties if caught are too high</b>	3.6	1.4	4.7
* indicates that results were skewed (< -2.0 or >2.0) and/or had high kurtosis			

The following tests were performed to determine any differences in the means for the students' ratings of the likelihood of each reason preventing cheating:

- ANOVAs were performed to determine differences ( $p \leq 0.05$ ) in the means obtained for the ratings of the likelihood of each reason preventing cheating when classified according to:
  - subject group
  - year of the course
- Independent groups *t*-tests were used to determine any significant differences ( $p \leq 0.05$ ) in the means obtained for the ratings of the likelihood of each reason preventing cheating when classified according to:
  - campus of study
  - study mode (fulltime or part time)
  - fee status (full fee paying or HECS)
  - gender
  - age group
  - average course performance to date (low or high)

The following results were obtained. Significant results are presented only. The non responses were never greater than 6% and these have not been shown.

*Scenarios showing a significant difference\* in the likelihood of preventing cheating ratings across subject groups*

Reason	Likelihood of preventing cheating									
	CSE1203		CSE2203		CSE3200		CSE1434		CSE2302	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
<b>Pride in your work</b>	3.9	1.2	<b>4.3</b>	1.0	<b>4.3</b>	0.9	4.1	1.2	4.1	1.3
<b>Can get good marks without cheating</b>	3.8	1.2	<b>4.2</b>	1.0	<b>4.2</b>	0.9	<b>4.2</b>	1.0	4.0	1.1
<b>Against your moral values</b>	3.7	1.3	<b>4.0</b>	1.0	3.7	1.3	<b>4.0</b>	1.0	3.7	1.3
<b>Against your religious beliefs</b>	2.8	1.6	<b>3.1</b>	1.5	2.8	1.6	2.4	1.5	2.5	1.7
<b>Don't know how to</b>	2.9	1.5	<b>3.0</b>	1.3	2.6	1.4	2.4	1.3	2.3	1.4

\* results were significant at the  $p \leq 0.05$  level for an ANOVA test

*Scenarios showing a significant difference\* in the likelihood of preventing cheating ratings between students classified according to campus of study*

Reason	Likelihood of preventing cheating			
	Caulfield		Clayton	
	Mean	SD	Mean	SD
<b>Against your religious beliefs</b>	<b>2.9</b>	1.6	2.5	1.6
<b>Fear of being found out</b>	<b>3.5</b>	1.4	3.2	1.5
<b>Don't know how to</b>	<b>2.9</b>	1.4	2.3	1.3

\* results were significant at the  $p \leq 0.05$  level for a *t*-test

*Scenarios showing a significant difference\* in the likelihood of preventing cheating ratings across year of course*

Reason	Likelihood of preventing cheating					
	1 <sup>st</sup> year		2 <sup>nd</sup> year		3 <sup>rd</sup> year	
	Mean	SD	Mean	SD	Mean	SD
<b>Want to know what your work is worth</b>	3.9	1.3	4.1	1.1	<b>4.3</b>	1.1
<b>Pride in your work</b>	3.9	1.2	4.2	1.1	<b>4.3</b>	1.0
<b>Can get good marks without cheating</b>	3.9	1.2	4.1	1.0	<b>4.2</b>	0.9
<b>Against your religious beliefs</b>	2.4	1.5	2.8	1.6	<b>3.0</b>	1.5

\* indicates that results were significant at the  $p \leq 0.05$  level

*Scenarios showing a significant difference\* in the likelihood of preventing cheating ratings between students classified according to study mode (fulltime or part time)*

Reason	Likelihood of preventing cheating			
	Full time		Part time	
	Mean	SD	Mean	SD
<b>Against your religious beliefs</b>	<b>2.7</b>	1.6	1.9	1.5

\* results were significant at the  $p \leq 0.05$  level for a *t*-test

*Scenarios showing a significant difference\* in the likelihood of preventing cheating ratings between students classified according to fee status (full fee paying or HECS)*

Reason	Likelihood of preventing cheating			
	Full fee paying		HECS	
	Mean	SD	Mean	SD
<b>Want to know what your work is worth</b>	<b>4.3</b>	1.0	3.9	1.3
<b>Against your religious beliefs</b>	<b>3.1</b>	1.5	2.3	1.6
<b>Fear of being found out</b>	<b>3.6</b>	1.3	3.2	1.5
<b>Don't know how to</b>	<b>2.9</b>	1.4	2.4	1.4
<b>Fairness to other students</b>	<b>3.3</b>	1.3	3.0	1.4
<b>Penalties if caught are too high</b>	<b>3.9</b>	1.4	3.5	1.4

\* results were significant at the  $p \leq 0.05$  level for a *t*-test

*Scenarios showing a significant difference\* in the likelihood of preventing cheating ratings between students classified according to gender*

Reason	Likelihood of preventing cheating			
	Male		Female	
	Mean	SD	Mean	SD
<b>Want to know what your work is worth</b>	4.0	1.2	<b>4.3</b>	1.2
<b>Pride in your work</b>	4.0	1.1	<b>4.3</b>	1.1
<b>Against your moral values</b>	3.7	1.2	<b>4.0</b>	1.2
<b>Against your religious beliefs</b>	2.6	1.5	<b>3.0</b>	1.6
<b>Fear of being found out</b>	3.3	1.4	<b>3.8</b>	1.3
<b>Penalties if caught are too high</b>	3.6	1.4	<b>3.9</b>	1.3

\* results were significant at the  $p \leq 0.05$  level for a *t*-test

## Commissioning assignment work

*What would you be prepared to pay for an assignment that is worth 40% of the semester's marks?*

Payment	Yes %
Wouldn't pay	74.3
< \$10%	2.6
\$10-\$19	3.3
\$20-\$49	5.3
\$50-\$99	5.5
\$100-\$199	2.9
\$200 plus	3.7
NR	2.4
<b>Total</b>	100.0

Cross tabulations were performed on the responses classified according to campus of study, year level, study mode (fulltime or part time), fee status (full fee paying or HECS), gender, age group (younger or older), or average course performance to date (low or high).

These showed that the higher performing students were less prepared to pay for an assignment and the lower performing students were prepared to pay more money for an assignment than the higher performing students.

There were no significant differences in responses based on campus of study, year level, study mode, fee status, gender or age group.

*Would you be prepared to write an assignment for a fee?*

Yes %	NR %
20.6	11.6

Cross tabulations were performed on the responses classified according to campus of study, year level, study mode (fulltime or part time), fee status (full fee paying or HECS), gender, age group (younger or older), or average course performance to date (low or high).

These showed that the male students would be more inclined to write an assignment for a fee than the female students.

There were no significant differences in responses based on campus of study, year level, study mode, fee status, age group, or average course performance.

## Detection of cheating

*If as part of the assessment for the assignment, you had to attend an interview with a tutor and explain your work would it:*

Response	Yes %
Reduce the likelihood of you cheating	32.0
Have no affect on the likelihood of you cheating	16.5
Increase the likelihood of you cheating	2.6
I never cheat so it is irrelevant	45.2
NR	3.6
<b>Total</b>	100.0

Cross tabulations were performed on the responses classified according to campus of study, year level, study mode (fulltime or part time), fee status (full fee paying or HECS), gender, age group (younger or older), or average course performance to date (low or high).

These showed that the later year students felt that having an interview for an assignment would be more likely to reduce the likelihood of them cheating.

There were no significant differences in responses based on campus of study, study mode, fee status, gender, age group, or average course performance.

*What would you do if you observed someone cheating in an exam?*

Response	Yes %
Ignore it	76.0
Call the supervisor and inform them	8.1
Talk to the student after the exam	4.9
Other	4.5
NR	6.5
<b>Total</b>	100.0

Cross tabulations performed on the responses classified according to campus of study, year level, study mode (fulltime or part time), fee status (full fee paying or HECS), gender, age group (younger or older), or average course performance to date (low or high) indicated no significant differences.

*What would you do if you observed someone cheating in an assignment?*

<b>Response</b>	<b>Yes %</b>
<b>Ignore it</b>	75.4
<b>Inform the lecturer</b>	5.5
<b>Talk to the student about it</b>	9.6
<b>Other</b>	3.1
<b>NR</b>	6.5
<b>Total</b>	100.0

Cross tabulations were performed on the responses classified according to campus of study, year level, study mode (fulltime or part time), fee status (full fee paying or HECS), gender, age group (younger or older), or average course performance to date (low or high).

These showed that the Caulfield students were more inclined to ignore assignment cheating than the Clayton students and the female students were more inclined to ignore cheating than the male students.

There were no significant differences in responses based on year level, study mode, fee status, age group, or average course performance.

### **Student perceptions of staff and University attitudes to cheating**

*In your opinion, how strongly do lecturers and tutors feel about preventing cheating in their subjects?*

<b>Mean %</b>	<b>SD</b>	<b>NR %</b>
3.8	1.1	5.2

*In your opinion, how strongly does the University as a whole feel about preventing cheating?*

<b>Mean %</b>	<b>SD</b>	<b>NR %</b>
3.9	1.1	5.6

For the above two questions Independent groups t-tests were used to show any differences in the means obtained for the students' ratings of how strongly their teachers or the University feel about preventing cheating when classified according to campus of study, year level study mode (fulltime or part time), fee status (full fee paying or HECS), gender, age group (younger or older), or average course performance to date (low or high).

These showed that a greater percentage of full-time students than part-time students, think that the University feels strongly about preventing cheating.

A Pearson's correlation between these two questions showed a strong relationship between the responses ( $r = 0.73$  significant at the 0.01 level).

There were no significant differences in responses based on campus of study, year level, fee status, gender, age group or average course performance.

*Are you aware of the University regulations on cheating?*

<b>Yes %</b>	<b>NR %</b>
80.9	4.5

Cross tabulations performed on the responses classified according to campus of study, year level, study mode (fulltime or part time), fee status (full fee paying or HECS), gender, age group (younger or older), or average course performance to date (low or high) indicated no significant differences.