Perceptions of the Prevalence and Seriousness of Academic Dishonesty in Australian Universities

Mark Brimble and Peta Stevenson-Clarke
Griffith University

Abstract

Academic dishonesty is a fundamental issue for the academic integrity of higher education institutions, and one that has lately been gaining increasing media attention. This study reports on a survey of 1206 students and 190 academic staff across four major Queensland universities in relation to student academic misconduct. The aim of the survey was to determine the prevalence of academic misconduct, and to investigate the extent to which perceptions of dishonesty are shared between students and staff, as preliminary steps toward developing effective strategies to deal with the academic dishonesty/misconduct problem. Results indicate a higher tolerance for academic misconduct by students in comparison to staff, particularly with respect to falsification of research results and plagiarism, as well as considerable underestimation by staff of the prevalence of virtually all forms of student academic misconduct. Overall, the study's findings confirm the significance of the issue of academic dishonesty within the Australian tertiary sector, indicating considerable divergence between students and staff in terms of perceptions of the seriousness and prevalence of student academic misconduct. We suggest that university administrators need to examine this issue closely in order to develop mechanisms for managing and curtailing the level of academic misconduct, since a failure to do so may lead to a further undermining of the academic integrity of the Australian tertiary sector.

Introduction

One of the key roles of institutions of higher education is to create an environment conducive to learning that will produce graduates who not only are highly skilled and technically competent, but also demonstrate high standards of honesty, ethical

responsibility and commitment to serving their relevant profession and society well. Academic misconduct (student cheating) directly undermines this process and continues to put pressure on academics and institutions in terms of managing it. As discussed by Lupton, Chapman and Weiss (2000), student cheating presents two obvious problems at the institutional level. Firstly, it threatens the equity and efficacy of instructional measurement, so that students' relative abilities are not accurately evaluated; and secondly, students who cheat probably reduce their level of learning so they are less prepared for advanced study or application of the material presented in a course. At the broader, societal level, it is likely that students who do not respect academic integrity while at university will not respect integrity in their future professional and personal relationships. An empirical study conducted by Nonis and Swift (2001) found a high correlation between the frequency of cheating at university/college and the frequency of cheating at work, suggesting that dishonest behaviour is not situation specific. The maintenance of academic integrity within educational institutions thus becomes a fundamental issue in terms of ensuring an environment where knowledge and understanding can be advanced and applied to the maximum benefit of individuals, the economy and society in general.

There is a perception, however, that educational institutions may be fighting a losing battle against academic misconduct, given an environment of technological advancements that make it increasingly easier for students to access and misuse resources. When combined with generally increasing class sizes (and, indeed, general workload of academics) and a relative scarcity of funds, the difficulty of monitoring and addressing the problem at the individual student level assumes enormous proportions. A key issue is the determination of just how prevalent academic misconduct is and whether it is sufficiently rife (as some anecdotally suggest) that it requires direct and immediate attention.

The purpose of this study, then, is to assess the prevalence and perceptions of academic misconduct within Australian higher education institutions. To this end, students and academic staff of four major Queensland universities were surveyed to determine their perceptions of the relative seriousness of various forms of academic misconduct, the penalties they consider appropriate for such misconduct and the reasons why students engage in academic misconduct. As well, survey participants were questioned about their actual personal experience of academic misconduct and their perceptions of the prevalence of academic misconduct in the student population.

The study contributes to the literature in several ways: (1) updating the literature in Australia in terms of the prevalence of academic misconduct to obtain a better understanding of the seriousness of the problem; (2) comparing and contrasting the

opinions of staff and students in terms of perceived seriousness, penalties and prevalence of academic misconduct in Australia; and (3) determining the reasons why students enter into various forms of academic misconduct.

The paper is structured as follows. The next section provides a summary of the relevant literature, followed by a description of the research methods employed. Results and analysis are then presented, with conclusions and recommendations contained in the final section.

Literature review

Prevalence of academic dishonesty and the influence of contextual versus individual factors

There is a wealth of published research into academic dishonesty among US college/university students. Much of this research has investigated the prevalence of dishonesty and the factors influencing such behaviour. One of the earliest published studies, a survey of five thousand students across ninety-nine university campuses, was conducted by Bowers in 1963 (cited in McCabe & Trevino 1996). Three out of four students surveyed admitted to having engaged in at least one of thirteen 'questionable' activities, such as copying from another student during an examination, using unauthorised materials during an examination, padding out a bibliography or collaborating on assignments requiring individual work. In a follow-up study conducted across the same campuses thirty years later, it was found that while the overall proportion of students admitting to having engaged in such questionable activities had increased only modestly, the incidence of some activities (including cheating in examinations, helping others to cheat and collaborating on individual work) had risen dramatically (McCabe & Bowers 1994, cited in McCabe & Trevino 1996).

McCabe and Trevino (1996) suggested that these trends might be associated with a changing environment for tertiary education, where universities have become larger, less personal and more competitive, leading to increasing student cynicism toward academic dishonesty. They proposed an approach toward reducing academic dishonesty that revolves around increasing social pressure to behave honestly, and cite the reduced incidence of (self-reported) academic dishonesty among students at universities with honour codes in support of their arguments.[1] Others who have associated increasing levels of student dishonesty with changing attitudes toward education include Nonis and Swift (2001) who argue that universities are now regarded by students more as credentialing institutions than as educational institutions, allowing students to more easily rationalise cheating.[2]

In addition to changing attitudes toward education, changing attitudes toward what constitutes acceptable behaviour in the business world have been suggested also as contributing toward a decline in student honesty, particularly with respect to business students. Amid a public perception of declining ethics in the business community – Cole and Smith (1995) went so far as to suggest that the term 'business ethics' has become an oxymoron to some – a number of recent studies have sought to investigate the relationship between academic dishonesty and unethical behaviour in the 'real world'. Lawson (2004) observed that NY business students generally have a good understanding of what constitutes ethical behaviour in the business world and the need for such behaviour, but they also believe that business people sometimes need to act unethically to advance their careers. Lawson found a very strong relationship between students' propensity to engage in unethical behaviour in an academic setting and their attitude toward such behaviour in the business world. Students who cheated in examinations or plagiarised assignments were found to be less likely to believe that people in the business world act ethically, and more accepting of the need for unethical behaviour in business, than those who did not engage in academic dishonesty.

Meanwhile, in a comparative study of business students in the US and in a number of Eastern European and Asian transitional economies, Grimes (2004) found that both groups of students generally viewed dishonesty in a business context more severely than dishonesty in an academic context, suggesting that students hold a lower standard of accountability for personal action within the university environment relative to the 'real world' of work and business. In fact, Grimes reported that while more than 85 per cent of the US students (40 per cent of the transitional economies students) believed that cheating in college/university was ethically wrong, 49 per cent (57 per cent) felt it was nevertheless acceptable.

Findings such as those of Lawson (2004) and Grimes (2004) suggest that increasing levels of student dishonesty may be reflective of the value systems being internalised by today's young people exposed to an almost daily media litany of fraud, bribery, insider trading and other forms of unethical behaviour in the 'real world'. The fear, then, is that cheating will become (has already become?) normative behaviour for today's students who are arguably under more pressure than ever before to achieve high grades in order to secure scholarships or well-paid employment. Thus, it becomes increasingly important that university administrators understand the factors that cause and maintain cheating behaviour, in order to be in a better position to promote and engender ethical attitudes and behaviours among students.

The current literature focus on the influence on levels of academic dishonesty of 'situational' or 'contextual' factors[3] reflects a shift in research paradigm that occurred

around the mid-1990s. Prior to that time, most of the research into academic dishonesty had examined the prevalence of dishonesty among students, and the influence of 'individual' factors[4] upon such dishonesty. In a review of empirical studies published between 1972 and 1997, Crown and Spiller (1998) noted the following with respect to individual factors:

- while earlier studies suggested cheating was more prevalent among males, more recent studies suggest female cheating is increasing, possibly due to a convergence of role requirements among males and females in the academic environment
- within the 'traditional' age-span of 17 to 22 years, findings have been mixed regarding whether older or younger students are more likely to cheat; however, there is some evidence that 'non-traditional' age students cheat less
- there is strong empirical support for a negative correlation between academic ability and cheating.

The shortcomings of the 'individual differences' approach were highlighted by McCabe and Trevino (1993), who pointed out that observations regarding the influence of individual factors on levels of academic dishonesty, while interesting from a demographic perspective (helping us understand individuals' predispositions to cheat), provide little guidance in terms of how the problem of academic dishonesty may be minimised. These authors argued for a shift in focus toward situational or contextual variables that are open to administrative influence, thereby enabling the development of institutional responses to issues of academic dishonesty. Employing survey data from more than 6,000 university students, McCabe and Trevino (1993) observed significant negative correlations between (self-reported) levels of academic dishonesty and the existence of an honour code (see Endnote 1), the perceived certainty of being reported and the perceived severity of penalties.

While the effectiveness of honour codes in reducing academic dishonesty has been the subject of considerable investigation over the years,[5] with most findings consistent with those of McCabe and Trevino (1993), the potential for findings to be influenced by social desirability effects is of concern for studies of this kind that rely on self-reported data. With respect to McCabe and Trevino's (1993) finding that academic dishonesty is influenced by the likelihood of being reported and the severity of penalties, similar findings have been reported by (among others) Nowell and Laufer (1997) and Haswell, Jubb and Wearing (1999). In the former study, cheating was observed to occur more frequently in large classes (where the perceived likelihood of being caught is lower), and in classes taught by non-tenured faculty (who are argued to be in a position of less power than tenured faculty, and therefore considered 'easy prey' by students). In one of the few empirical studies in this area to be conducted outside the US, Haswell, Jubb and Wearing (1999) found that for a

pooled sample of UK, South African and Australian students, the willingness of students to engage in a variety of forms of plagiarism in a risk-free environment fell dramatically when detection risk and significant penalties were introduced, with size of penalty exerting a greater influence than risk of detection.

Interestingly, though, the factor observed by McCabe and Trevino (1993) to be most strongly associated with academic dishonesty was 'perceptions of peers' behaviour', a variable that encompassed students' estimated frequency of cheating by peers as well as the actual frequency with which they had observed peers cheating. Further, student perceptions of their peers' behaviour were found to be significantly influenced by an institution's ability to develop a shared understanding and acceptance of its academic integrity policies, leading the authors to suggest (pp. 533-534) that '… programs aimed at distributing, explaining, and gaining student and faculty acceptance of academic integrity policies may be particularly useful (in reducing academic dishonesty)'.

Attitudes toward academic misconduct

The concept of a shared (between faculty and students) understanding of academic integrity – what it means and how it can be achieved – has been examined by a number of other researchers. Stern and Havlicek (1986, cited by Lupton et al. 2000) found that student and faculty opinions on what behaviours constitute cheating often diverge significantly, with students being more tolerant of questionable behaviour. Similarly, Roig and Ballew (1994) found that students' attitudes toward cheating were significantly lower (more tolerant) than faculty's attitudes. Interestingly, these authors also found that students who held a tolerant attitude toward cheating projected similar attitudes toward faculty, thereby excusing their own tolerance toward cheating (consistent with neutralising theory – see Endnote 2). Roig and Ballew argued for faculty to take a more active role in establishing an atmosphere of academic integrity in the classroom (by, for example, communicating to students their strong position on academic dishonesty and the negative consequences of such behaviour, vigilance during examinations, and professional and timely retribution for cheating), since inaction would likely result in the reinforcement of such conduct.

Roberts and Toombs (1993) examined the extent to which students and faculty share perceptions of cheating via a comparison of recommended penalties for various types of (examination-related) dishonest behaviours, arguing that the development of prevention strategies would be easier where faculty and students perceive cheating with similar degrees of seriousness. In general, faculty were found to recommend harsher penalties than students, prompting the authors to call for '… a comprehensive effort to implement strategies of what both faculty and students view as appropriate to deal with cheating' (Roberts and Toombs (1993) argued that the development of

effective strategies to reduce the incidence of academic misconduct hinges upon cooperation between students, faculty and academic institutions).

An integrated approach

While the literature reviewed to this stage largely focused on describing relationships between academic dishonesty and either individual or contextual variables, with little regard to theoretical integration or explanation of the phenomenon, a recent study by Bolin (2004) has attempted to examine academic dishonesty within the broader context of deviant behaviour and delinquency. Using self-report data and path analysis techniques, Bolin observed that cheating behaviour is well explained by Gottfredson and Hirschi's (1990) general theory of crime (which posits that the major causes of all deviant behaviour are lack of self-control, perceived opportunity and the interaction between them), with the addition of the variable 'attitude toward academic dishonesty'. This variable, which was constructed to measure students' moral evaluations of cheating, explained nearly 40 per cent of the variation in academic dishonesty by US psychology students.

Bolin (2004) was not the first to observe an association between academic dishonesty and students' attitudes toward dishonesty. For example, Salter, Guffey and McMillan (2001) observed that the propensity for US and UK accounting students to cheat was positively correlated with a number of 'attitude' variables, including tolerance for cheating, perceived acceptability of cheating in the students' university and student cynicism. Nevertheless, Bolin's (2004) study is noteworthy because it places academic dishonesty within the context of an empirically supported theory with the potential to explain and predict such behaviour, and ultimately permit the development of intervention strategies. In this regard, Bolin argues:

> Because attitudes are less enduring than personality traits such as self-control (which is shaped in childhood), and requires less frequent intervention than the eternal vigilance needed to reduce opportunity (to cheat), intervention aimed toward influencing student attitudes toward dishonesty (for example, education or honour codes) would seem to have a higher likelihood of success at a much lower cost (Bolin 2004, p. 110).

Consistent with this approach, US universities are reported to be increasingly implementing strategies, based on traditional or modified honour codes that emphasise student leadership and peer reporting, in an attempt to reduce the incidence of academic misconduct (see McCabe and Pavela 2000). As to the efficacy of these strategies, it is probably too soon to judge. However, a longitudinal study conducted at one US university failed to find consistent evidence of a reduction in student participation in various forms of academic misconduct after the introduction

of an honour code-like 'academic integrity policy' (Von Dran, Callahan and Taylor 2001). While significant reductions occurred with respect to those behaviours over which instructors had some measure of control (for example, cheating in examinations), those behaviours that provided little opportunity for supervision (such as plagiarism) did not reduce significantly, suggesting that the effect of the policy was to increase faculty vigilance rather than student ethical conduct *per se*.

With respect to an educational approach, the introduction of ethics courses into university curricula would seem to provide a potential means of increasing students' ethical sensitivity and, hence, behaviour; however, the effectiveness of such courses in curbing student dishonesty has not been demonstrated. While there is evidence that ethics education can lead to heightened moral development, the link between moral development and honesty is tenuous, with a number of studies (most recently, Bernardi et al. 2004 and West, Ravenscroft and Shrader 2004) indicating that the relationship between moral development and student cheating is insignificant.

Nonis and Swift (2001) argued for a more fundamental approach involving the teaching of integrity and discussion of ethical issues in every course, with particular emphasis in the capstone courses, rather than just in specialised ethics classes. Such an approach focuses not so much on teaching students the rules of ethical analysis, but on providing a strong ethical foundation that becomes ingrained in students over the duration of their studies so that they come to value integrity and honesty in their own (and others') behaviour. The authors call upon faculty to become role models for ethical conduct, citing in support of their argument a study by Sauser (1990) that found the behaviour of business professors taught students more about ethical behaviour than any other technique. Similarly, a study by David, Anderson and Lawrimore (1990) found that 92 per cent of graduates who had been out of university for several years believed their professors' actions to be one of the most important factors in determining students' development of ethical standards and values.

Thus it would appear that if universities are to establish a shared commitment to academic integrity and ethical behaviour, strategies must extend beyond the teaching of ethics in the classroom to include the enforcement of ethical standards and the modelling of appropriate behaviour by faculty members. Faculty must be educated with respect to institutional policies, so as to be able to communicate these to students, and must be supported by administrators in their attempts to enforce these policies. At the same time, faculty must be educated as to what constitutes appropriate behaviour on their part and be willing to act accordingly, while administrators must be prepared to support and enforce such a code of conduct for faculty. Within such an environment, students are more likely to internalise ethical standards and act accordingly.

While these conclusions may be drawn from the US literature reviewed thus far, should we expect similar strategies to be effective in Australia? Are Australian students similar to US students in terms of the prevalence of academic dishonesty, the factors that influence such behaviour and the strategies most likely to be effective in reducing such behaviour?

The Australian situation

There is a relative paucity of published Australian research into academic dishonesty at the tertiary level. A survey of Computing and Information Technology postgraduate students, carried out by academics at Monash University, sought students' views on the acceptability of a variety of scenarios involving cheating, as well as their knowledge of the occurrence of these scenarios (Dick, Sheard and Markham 2001). It was found that students were fairly homogeneous in their views of what constituted acceptable (for example, resubmitting an assignment from a previous subject in a different subject) and unacceptable (for example, exam cheating) practice, but that their views did not necessarily correspond with University policy on what is acceptable. Further, it was found that for seven of the 16 'dishonest' scenarios presented to students, at least ten per cent of students admitted having engaged in such behaviour; while the proportion of students claiming to personally know someone else who practiced such behaviour was at least ten per cent for 14 of the 16 scenarios.

A similar survey of undergraduate students studying either Computer Science and Software Engineering at Monash University or Information Technology at Swinburne University (Sheard, Dick, Martin, Macdonald and Walsh 2002) produced results broadly in agreement with those of the previous study. That is, there was strong agreement among students about the unacceptability of the more serious forms of cheating (such as exam cheating, submitting an assignment written by someone else); yet nine of the 16 scenarios had been personally practiced by at least ten per cent of the surveyed students, while for 15 of the 16 scenarios the proportion of students claiming to personally know someone who had practiced such behaviour was at least ten per cent. Interestingly, significant variations in cheating practices were observed between the two universities, which the authors suggested might have been influenced by differing modes of assessment adopted by the two universities. Approximately 80 per cent of students at both universities indicated they would do nothing if they observed a student cheating in an exam or assignment, which the authors attribute to students believing that no effective actions are available to those who become aware of others cheating.

While the results of these two Australian studies are broadly consistent with US research findings, it is not known whether the results are generalisable across the

entire Australian tertiary sector, since the numbers of students surveyed were relatively small (103 students surveyed by Dick *et al.* 2001, and 247 students surveyed by Sheard *et al.* 2002), with all students studying Computing/Information Technology at either Monash University or Swinburne University. Hence, there is a need for further investigation across a much larger and broader sample of students to determine the extent of academic dishonesty within the Australian tertiary sector, and for an investigation into the extent to which perceptions of dishonesty are shared between students and staff, as preliminary steps toward developing effective strategies to deal with the academic dishonesty problem in Australia.

Method

Data

This study uses two survey instruments to collect data, one for students and one for academic staff of four universities in Queensland.[6] The staff surveys were distributed by mail with a covering letter introducing the project and the research team.[7] A total of 772 surveys were distributed to academic staff with 190 responses received, giving a response rate of 25 per cent, which is seen as sufficient for this project.[8] Of those that responded, slightly more were male (57 per cent) than female (43 per cent), with age skewed toward the higher end (with 40 per cent of respondents aged 50 or over). While the sample was not evenly distributed across disciplines (with 24 per cent from business, 41 per cent from the arts, 29 per cent from science and 6 per cent from other areas), this distribution is broadly consistent with the academic population at the institutions surveyed, as are the statistics pertaining to age and gender. Additionally, most respondents (58 per cent) had taught more than 2000 students across their academic teaching career, and a larger majority (87 per cent) were teaching predominantly undergraduate students. Full descriptive statistics for the staff sample are contained in Table 1.

Gender		Age				Discipline				Years of Tertiary Teaching Experience			
M %	F %	<31 %	31-40 %	41-50 %	>50 %	Business %	Science %	Arts %	Other %	<5 %	5-11 %	11-20 %	>20 %
57	**43**	**5**	**20**	**35**	**40**	**24**	**41**	**29**	**6**	**18**	**26**	**38**	**18**

Table 1
Descriptive Statistics for Academic Staff Respondents

The student surveys were administered in class across the four institutions. This enabled the person administering the survey to explain the importance of the project with a view to soliciting more accurate responses from the students.[9] The survey was

administered to 1206 students with thirty-two responses eliminated from the sample due to the survey being incomplete, giving a final sample of student responses of 1174. Of these, 59 per cent were female and 41 per cent male. Over 90 per cent of students were undergraduates, with 79 per cent being engaged in tertiary education for two or more years. In terms of age, the majority (71 per cent) were aged 25 or younger. With respect to discipline, our sample is skewed toward business students (78 per cent), which may be explained by the generally larger class sizes found in business programs compared to other disciplines. Table 2 provides full descriptive statistics.[10]

Gender		Age				Discipline				Years of Tertiary Teaching Experience			
M %	F %	<20 %	20-25 %	26-35 %	36-45 %	>45 %	Business %	Science %	Arts %	Other %	<2 %	2-3 %	>3 %
41	**59**	**28**	**43**	**19**	**8**	**2**	**78**	**16**	**4**	**2**	**22**	**55**	**23**

Table 2
Descriptive Statistics for Student Respondents

Survey instrument

As indicated above, two survey instruments were used in this study: one for students and one for academics.[11] Both surveys contained three sections, with Section A collecting demographic information such as age, gender, ethnicity and discipline area. The staff survey also asked for the level of qualification that the majority of respondents' students were studying for, how many students (approximately) had been taught in their career and how many years the respondent had been teaching.

Section B of both instruments proposed twenty scenarios relating to academic dishonesty. These covered a variety of issues ranging from plagiarism to cheating on examinations (see Table 3 for the full list). For each of these, the respondent was asked to complete four questions indicating: (1) how serious they felt this form of academic misconduct to be; (2) what penalty they considered appropriate for students engaging in this misconduct; (3) how prevalent they thought this misconduct was within the student community; and (4) their history in committing this misconduct (students) or in having their students engage in this misconduct (academics). With respect to seriousness, respondents were asked to indicate whether they considered the scenario to be either not cheating, minor cheating or serious cheating, or if they didn't know. Regarding penalties, seven possible responses were provided: (1) no penalty; (2) warning; (3) reduction in marks for the assessment; (4) fail grade for the assessment; (5) fail grade for the course; (6) expulsion from the institution; or (7) don't know. Respondents were asked to estimate prevalence by indicating a

percentage, and history was completed with one of four responses: (1) never; (2) seldom (1-2 times); (3) occasionally (3-5 times); or (4) frequently (6 or more times). These sections were the same for both surveys.

No	Scenario
1	Copying from another student during a test.
2	One student allowing another to copy from them in a test.
3	Taking unauthorised material into a test – notes, pre-programmed calculator, etc.
4	Giving answers to another student by signals in a test.
5	Receiving answers from another student by signals in a test.
6	Getting someone else to pretend they are the student – impersonating the student in a test.
7	Continuing to write after a test has finished.
8	Gaining unauthorised access to test material before sitting – test paper, marking schedule, etc.
9	Requesting special consideration/deferred exam (eg for illness) knowing that the conditions are not genuinely met.
10	Padding out a bibliography with references that were not actually used.
11	Paying another person to complete an assignment.
12	Writing an assignment for someone else.
13	Paraphrasing information from a web site, book or periodical without referencing the source.
14	Copying information directly from a web site, book or periodical with reference to the source but no quote marks.
15	Copying information directly from a web site, book or periodical without referencing the source.
16	Copying information directly from another student's assignment (current or past) without their consent.
17	Copying information directly from another student's assignment (current or past) with their consent.
18	Falsifying the results of one's research.
19	Working together on an assignment when it should be individual.
20	Preventing other students access to resources required to complete an assignment.

Table 3
Scenarios From Test Instrument

The third section of both surveys included an additional question in relation to the reasons for students committing academic misconduct. Students were asked to nominate from a list of twenty-one reasons (see Table 4) why they committed academic misconduct if they had admitted to it in section two, while staff were asked to indicate (from the same list) the reasons that students had given them when caught engaging in academic misconduct.

No	Reason
1	I wasn't likely to be caught.
2	I wanted to help a friend.
3	The assessment was too time-consuming.
4	The assessment was too difficult.
5	I had a personal crisis.
6	I didn't think it was wrong.
7	It was easy – the temptation was too great.
8	The due date was too soon.
9	The teacher hadn't taught me well enough.
10	I was under pressure to get good grades.
11	Other students do it (or urged me to do it).
12	I thought the assessment was unfair.
13	I thought if I helped someone else, they might help me.
14	I hadn't heard of other students being penalised before.
15	The due date coincided with other assessments due.
16	The content of the assessment was not of interest to me.
17	My teacher encouraged it.
18	Cheating is a victimless crime – it doesn't harm anyone.
19	It was unintentional.
20	No reason.
21	Other (please specify) . . . . .

Table 4
Reasons for Students' Engagement in Academic Misconduct

Results

The survey results are presented in four sections: (1) perceptions of the seriousness of the various academic misconduct scenarios; (2) perceptions of penalties for the academic misconduct scenarios; (3) prevalence of the academic misconduct scenarios; and (4) reasons for academic misconduct.

Perceptions of the seriousness of the academic misconduct scenarios

In both student and staff surveys, the first question in Section B asked respondents to indicate the level of seriousness they attached to each of the scenarios, with possible responses presented as N (not cheating), M (minor cheating), S (serious cheating) and

D (don't know). For each scenario, the number of responses in each category was compared between students and staff, and chi-square tests of independence conducted. A significant divergence between student and staff perceptions of seriousness was observed for every scenario, with staff perceiving the seriousness to be greater than students in every case. Those scenarios for which student-staff divergence on perceptions of seriousness was greatest were (in descending order of significance): Scenario 18 (falsifying the results of one's research), Scenario 17 (copying information directly from another student's assignment with their consent), Scenario 15 (copying information directly from a website, book or periodical without referencing the source), Scenario 19 (working together on an assignment when it should be individual), Scenario 12 (writing an assignment for someone else) and Scenario 13 (paraphrasing information from a website, book or periodical without referencing the source).

The finding that students view academic dishonesty less seriously than academic staff do is consistent with the US literature previously discussed (Roig and Ballew 1994, Stern and Havlicek 1986) and suggests that Australian students are not dissimilar to their US counterparts in this regard. It is likely that a divergence of opinion regarding the seriousness of plagiarism (Scenarios 13, 15 and 17) and collaboration on individual assignments (Scenario 19) is at least partly attributable to student ignorance or misunderstanding (that is, a breakdown in communication between staff and students). It is difficult, however, to understand why students should perceive such behaviours as falsifying the results of one's research (Scenario 18) or writing an assignment for someone else (Scenario 12) as less serious than academics perceive them. Particularly disturbing are the findings regarding the falsification of research results, with 40 per cent of students regarding this as 'minor cheating' and 11 per cent regarding it as 'not cheating at all'(compared with one per cent and zero per cent, respectively, for staff).[12] It would appear that students (or at least the cohort of students surveyed) attach little significance to integrity in research, implying that academic research is undervalued by students relative to staff. This finding should be of grave concern to university administrators since research is often a key element of assessment practices, particularly in advanced courses, and such actions may engender unacceptable behavioural patterns that are carried into honours and research higher degree studies with significant consequences for the entire academic community.

Perceptions of penalties for the academic misconduct scenarios

The second question in Part B of the surveys required students and staff to indicate what they believed to be the most appropriate penalty, from a list of six possible penalties (ranging from 'no penalty' through to 'expulsion from the institution') for students caught engaging in the various misconduct scenarios. Penalties were

awarded a numerical value from one to six (beginning with one for 'no penalty' and progressing through to six for 'expulsion from the institution'). For every scenario, student recommended penalties were lower than staff recommended penalties (based on mean numerical values), in accordance with the higher perceptions of seriousness displayed by staff with respect to each scenario (as described earlier), and consistent with prior US research (for example, Roberts and Toombs 1993).

It should be noted, however, that the most commonly recommended penalty differed between students and staff for only eight of the twenty scenarios. These eight scenarios (four of which are common to the set of six scenarios exhibiting greatest student-staff divergence on perceptions of seriousness, as identified above) are indicated in Table 5, together with the penalties most commonly recommended by both students and staff. Consistent with the findings described in the previous section, the greatest divergence between student and staff recommended penalties occurred for Scenario 18 (falsifying the results of one's research), highlighting once again the gap between student and staff perceptions of the importance of integrity in research.

Scenario	Most commonly recommended penalty (students)	Most commonly recommended penalty (staff)
6 (impersonation in a test)	Fail grade for the course	Expulsion/refused re-enrolment
8 (gaining unauthorised access to test material)	Fail grade for the assessment	Fail grade for the course
10 (padding bibliography with references not used)	Warning	Reduction in marks for the assessment
11 (paying another to complete an assignment)	Fail grade for the assessment	Fail grade for the course
12 (writing an assignment for someone else)	Fail grade for the assessment	Fail grade for the course
15 (copying information without referencing the source)	Reduction in marks for the assessment	Fail grade for the assessment
18 (falsifying research results)	Reduction in marks for the assessment	Expulsion/refused re-enrolment
19 (collaborating on individual work)	No penalty	Reduction in marks for the assessment

Table 5
Student-Staff Divergence on Recommended Penalties for Academic Misconduct Scenarios

Interestingly, when the scenarios are ranked according to the severity of the average recommended penalty, the implied order of seriousness is quite similar for both students and staff. For both groups, Scenarios 6 (impersonation in a test), 8 (gaining unauthorised access to test material) and 11 (paying another person to complete an assignment) are associated with the highest average penalties; while Scenarios 7 (continuing to write after a test has finished), 10 (padding out a bibliography with references not actually used) and 19 (collaboration on individual work) attract the lowest average penalties. As already discussed, Scenario 18 (falsifying the results of one's research) also ranks very highly (in terms of recommended penalty) with respect to staff, although not with respect to students.

Overall, these findings indicate that despite a generally higher tolerance for cheating exhibited by students, rankings of cheating behaviours in terms of level of seriousness display marked similarities between students and staff, indicating some degree of shared perceptions between the two groups.

Prevalence of the academic misconduct scenarios

Section B of the survey also asked both student and staff respondents to estimate the percentage of students they believed to be involved in each of the misconduct scenarios. It was found that for every scenario, staff estimated the prevalence to be considerably less than students estimated it to be. Next, comparisons between staff estimates of prevalence and actual prevalence (as indicated by the percentage of students admitting to having engaged in the behaviours presented in the scenarios) were carried out. For all except two of the scenarios, staff underestimated the actual prevalence, often by a factor of four or more.[13] The only scenarios for which staff did not underestimate the actual prevalence were Scenario 9 (requesting special consideration/deferred exam knowing that the conditions are not genuinely met) and Scenario 11 (paying another person to complete an assignment). Those scenarios providing the greatest divergence between staff estimates of prevalence and actual prevalence were: Scenario 18 (falsifying the results of one's research), Scenario 2 (one student allowing another to copy from them during a test), Scenario 1 (copying from another student during a test) and Scenario 7 (continuing to write after a test has finished). These results suggest some degree of naivety on the part of academic staff with respect to student academic misconduct.

Students, on the other hand, appear to be relatively well informed with respect to the prevalence of dishonest practices among their peers. There were only two scenarios for which students underestimated the actual prevalence (self-reported frequency): Scenario 2 (one student allowing another to copy from them during a test) and Scenario 7 (continuing to write after a test has finished). For several scenarios, students considerably overestimated the actual prevalence – most notably, Scenario 11 (paying another person to complete an assignment), Scenario 17 (copying information directly from another

student's assignment with their consent), Scenario 20 (preventing another student's access to resources needed to complete an assignment) and Scenario 9 (requesting special consideration/deferred exam knowing that the conditions are not genuinely met). Assuming our survey results do not understate the actual frequencies of these behaviours, then it would appear that student suspicions about the prevalence of these four behaviours are somewhat exaggerated. Nevertheless, our findings overall suggest that student perceptions regarding the prevalence of academic misconduct are more in line with reality than the perceptions of staff, who consistently underestimate the level of misconduct engaged in by their students.

With respect to the actual prevalence (self-reported frequencies) of the various academic misconduct scenarios, these are presented in Table 6. As expected, students engaged most frequently in those forms of misconduct they viewed least seriously. These were (in descending order of frequency): Scenario 19 (collaboration on individual work), Scenario 7 (continuing to write after a test has finished), Scenario 14 (copying information directly from a website, book or periodical with reference to the source but no quote marks), Scenario 13 (paraphrasing information from a website, book or periodical without referencing the source) and Scenario 10 (padding out a bibliography with references not actually used), with more than 50 per cent of students admitting having participated in the first two of these. Those forms of misconduct engaged in least frequently were those viewed by students as being the most serious, being Scenario 6 (impersonation in a test), Scenario 11 (paying another person to complete an assignment), Scenario 8 (gaining unauthorised access to test material) and Scenario 16 (copying another student's assignment without their consent). For each of these scenarios, the participation rate was less than ten per cent of students. It must be emphasised, however, that these frequencies may not be truly representative of the actual prevalence of the various academic misconduct scenarios, because of the potential for bias in self-reported data due to social desirability effects.

Reasons for academic misconduct

Section C of the two surveys asked students who had engaged in academic misconduct (as indicated in Section B) to nominate their reasons for engaging in such conduct. Similarly, staff were asked to indicate the reasons they had been given by students in justifying such behaviour. Table 7 summarises the responses in percentage terms, with a ranking also given. For both staff and students, the responses were widely distributed over the twenty possible responses, with ten of the responses for both staff and students receiving more than 20 per cent support. The results also indicate considerable divergence between the reasons students cite for engaging in academic misconduct and those that academic staff have had provided (by students) to them, suggesting that the reasons students give to academic staff may not be a true reflection of the underlying motivations for their behaviour.

		Students (%) who have engaged in this activity:			
No	**Scenario**	**Never**	**1-2 times**	**3-5 times**	**>5 times**
1	Copying from another student during a test.	81	15	4	1
2	One student allowing another to copy from them in a test.	76	17	6	1
3	Taking unauthorised material into a test – notes, pre-programmed calculator, etc.	88	7	3	1
4	Giving answers to another student by signals in a test.	89	7	3	1
5	Receiving answers from another student by signals in a test.	91	6	3	1
6	Getting someone else to pretend they are the student – impersonating the student in a test.	96	1	2	1
7	Continuing to write after a test has finished.	47	35	13	4
8	Gaining unauthorised access to test material before sitting – test paper, marking schedule, etc.	92	4	3	1
9	Requesting special consideration/deferred exam (eg for illness) knowing that the conditions are not genuinely met.	87	9	3	1
10	Padding out a bibliography with references that were not actually used.	55	30	11	4
11	Paying another person to complete an assignment.	94	3	3	0
12	Writing an assignment for someone else.	89	7	3	1
13	Paraphrasing information from a web site, book or periodical without referencing the source.	53	34	11	2
14	Copying information directly from a web site, book or periodical with reference to the source but no quote marks.	51	36	10	3
15	Copying information directly from a web site, book or periodical without referencing the source.	70	22	6	2
16	Copying information directly from another student's assignment (current or past) without their consent.	91	6	3	1
17	Copying information directly from another student's assignment (current or past) with their consent.	75	17	6	1
18	Falsifying the results of one's research.	79	13	6	2
19	Working together on an assignment when it should be individual.	46	31	17	5
20	Preventing other students access to resources required to complete an assignment.	90	6	3	1

Table 6
Prevalence of Academic Misconduct

Reason	Student Responses % (n)	Student Ranking	Staff Responses % (n)	Staff Ranking
I wanted to help a friend.	43 (381)	1	56 (107)	3
The assessment was too difficult.	37 (329)	2	35 (66)	6
The assessment was too time-consuming.	36 (318)	3	32 (61)	8
I wasn't likely to be caught.	33 (295)	4	16 (31)	13
It was unintentional.	31 (278)	5	53 (101)	4
I didn't think it was wrong.	26 (228)	6	61 (115)	2
The due date was too soon.	24 (214)	7	19 (37)	11
The due date coincided with other assessments due.	2 (188)	8	33 (63)	7
I was under pressure to get good grades.	21 (185)	9	32 (61)	9
The teacher hadn't taught me well enough.	20 (175)	10	13 (25)	14
I had a personal crisis.	17 (155)	11	70 (133)	1
I thought if I helped someone else, they might help me.	17 (154)	12	8 (15)	16
Other students do it (or urged me to do it).	13 (118)	13	39 (74)	5
The content of the assessment was not of interest to me.	12 (111)	14	4 (7)	19
It was easy – the temptation was too great.	12 (103)	15	8 (16)	15
I hadn't heard of other students being penalised before.	11 (95)	16	17 (33)	12
I thought the assessment was unfair.	10 (89)	17	5 (9)	18
No reason.	6 (54)	18	30 (57)	10
My teacher encouraged it.	5 (47)	19	0 (0)	20
Cheating is a victimless crime – it doesn't harm anyone.	5 (43)	20	6 (11)	17

This table provides summary percentage responses from staff and students to the above reasons for students entering into academic misconduct, with actual numbers of responses indicated in parentheses. Respondents could select more than one response.

Table 7
Reasons for Academic Misconduct

Students' top five reasons for engaging in academic misconduct were: 'I wanted to help a friend' (43 per cent); 'The assessment was too difficult' (37 per cent); 'The assessment was too time-consuming' (36 per cent); 'I wasn't likely to be caught' (33 per cent) and 'It was unintentional' (31 per cent). Interestingly, two of these were among the five justifications most commonly encountered by staff, with 'I wanted to help a friend' (encountered by 56 per cent of staff) being ranked number three and 'It was unintentional' (53 per cent) being ranked number four. The remaining three top five responses provided to staff included 'I had a personal crisis' (ranked number

one with 70%), 'I didn't think it was wrong' (ranked number two with 61 per cent), and 'Other students do it' (ranked number five with 39 per cent).

These results indicate an important division in reasons offered to academics and actual reasons admitted by students. The reasons given to academics by students caught engaging in academic misconduct are defensive, indirect responses such as 'I had a personal crisis', and 'I didn't think it was a mistake'. Yet the students, themselves, appear to be suggesting that the actual reasons are more related to the difficulty and time-consuming nature of the assessment (consistent with 'neutralisation' theory) and their perception that they are not likely to be caught. This is consistent with the US literature where the adoption of neutralisation techniques to rationalise cheating has been reported by a number of researchers (including Haines et al. 1986, McCabe and Trevino 1993, Storch et al. 2002), while others have observed a negative correlation between academic dishonesty and the likelihood of being reported (McCabe and Trevino 1993, Nowell and Laufer 1997, Haswell, Jubb and Wearing 1999).

Other divergences in staff and student responses are indicated by the rankings of the responses. 'I had a personal crisis' is ranked one by staff (with 70 per cent response rate) but ranked eleventh by students (17 per cent); 'I wasn't likely to be caught' is ranked four by students (33 per cent response rate) and ranked thirteen by staff (16 per cent); 'Other students do it' is ranked thirteen by students (13 per cent response rate) and five by staff (39 per cent); while 'No reason' is ranked eighteen by students (6 per cent response rate) and ten by staff (30 per cent). These differences again suggest that students are providing different justifications for academic misconduct to staff than those that are actually leading to their behaviour.

There also appears to be some commonality in terms of students wanting to help other students and accidental misconduct (indicating a lack of understanding on behalf of students as to what constitutes academic dishonesty). Both of these reasons were ranked in the top five by both staff and students, suggesting that students are willing to admit to staff when dishonest behaviour has been for altruistic reasons or unintentional.

Finally, respondents were invited to provide any additional comments, with a number of interesting observations made, particularly with respect to plagiarism. Staff responses tended to highlight the issue of students not being aware of rules in relation to plagiarism and methods of referencing, as well as students being confused by the different methods of referencing required by different academics. Staff also identified problems arising out of cultural differences, where plagiarism may not be seen as a 'crime' in some cultures, as well as language barriers to students completing assessment and comprehending course content.

The student responses also highlighted the confusion and lack of knowledge over referencing conventions and differing requirements across courses. In particular, comment was made regarding the requirement for a minimum number of references for assignments, as well as problems experienced in group work situations.

Overall, this section of the survey indicated that students engage in academic misconduct due to: (1) assessment items being too difficult, time consuming and/or due at the same time as other pieces of assessment; (2) wanting to help fellow students; (3) confusion in terms of what is and isn't academic misconduct (particularly in relation to plagiarism and referencing); and (4) the perception that they are not likely to be caught. These reasons are not congruent with the reasons students provide to staff, with some important differences indicating that students are misleading staff in terms of their reasons for engaging in academic misconduct.

Summary and conclusions

This paper reports on surveys of both students and academic staff of four major Queensland universities in relation to academic misconduct. Staff and students were questioned about their perceptions of the relative seriousness of various forms of academic misconduct, what penalties are appropriate for such misconduct and the reasons provided by students/to staff for entering into such conduct. As well, survey participants were questioned about the prevalence of such conduct in terms of actual personal experience and perceptions with respect to the student population.

The study was motivated by both the prior literature and anecdotal concerns of colleagues indicating that academic misconduct is highly prevalent within institutions of higher education, with limited evidence of the extent and nature of it in the Australian context. In particular, there is little empirical evidence on perceptions of academics and students in relation to penalties and the relative seriousness of different forms of academic misconduct.

Compared to academic staff, students are found to exhibit a higher tolerance for the various forms of academic misconduct addressed in the survey, as evidenced by their lower perceptions of the seriousness of the misconduct, together with lower recommended penalties. Of particular concern are the attitudes of students toward falsification of research results and plagiarism of work from both other students and formal sources. With respect to plagiarism, our findings serve to support the prior literature and, importantly, the concerns of academics in terms of student attitudes toward plagiarism and the ramifications for the assessment process and students' learning outcomes. Our findings regarding student attitudes toward the falsification of research results, an issue that has not been investigated in prior research, are

particularly alarming. Such dishonesty goes to the heart of the academic enterprise, and as such, requires immediate attention by academic management.

While we find that students appear relatively well informed with respect to the prevalence of dishonest practices among their peers, staff tend to be somewhat naïve in this regard, sometimes underestimating the prevalence of student dishonesty by a factor of four or more. Finally, the study finds that students are engaging in academic misconduct for more deliberate and self-interested motives than they are leading academics to believe.

Overall, this evidence confirms and extends the prior literature in relation to academic misconduct in Australian universities. The anecdotal sentiment of the academic community in terms of the significance of this issue is also confirmed. Based on our findings and those of the previous research, we suggest that institutions need to examine the strength and application of their academic misconduct policies. Further, institutions need to ensure that academic staff and academic management rigorously apply policy, and that both are vigilant in terms of identifying dishonest behaviour. It also appears necessary to examine assessment policies to ensure that the methods and invigilation of assessment are likely to minimise the opportunity for students to engage in misconduct. Additionally, courses must be sufficiently resourced, in terms of time, human and technical resources, to ensure the integrity of student work. We would argue that the allocation of sufficient resources to the implementation of such strategies is easily justifiable, since failure to address the prevalence of academic misconduct may lead to further undermining of the academic integrity of Australian universities.

Acknowledgement

This study forms part of a larger, multinational study being conducted across tertiary institutions in Australia, New Zealand, the United States and the United Kingdom. The survey instruments used for this study were developed and piloted by our New Zealand colleagues (de Lambert, Ellen and Taylor 2003).

Endnotes

[1] Academic honour systems operate at many US institutions of higher education. Typically, students pledge to abide by an honour code that clarifies expectations regarding appropriate and inappropriate behaviour, and take responsibility for detection and sanctioning of violations when they occur.

[2] For example, McCabe and Trevino (1993) found that students at universities with high levels of cheating often discuss the issue in terms of a 'we' versus 'they' mentality. That is, cheating by 'us' (students) is acceptable because 'they' (faculty and/or administration) 'deserve' it for reasons such as unreasonable assignments, poor teaching, unclear instructions on assignments, etc. By rationalising cheating in this way, students are able to guard against their own disapproval of the dishonest behaviour, as well as that of others. Such behaviour is consistent with 'neutralisation theory' which posits that individuals are able to engage in deviant activities without damage to one's self-image by justifying acts prior to their commission through various manners of rationalisation. (For a discussion of neutralisation theory see, for example, Sykes & Matza 1957). Others who have observed a similar rationalisation of cheating by students include Haines, Kiefhoff, Labeff and Clark (1986) and Storch, Storch and Clark (2002).

[3] As defined by Ford and Richardson (1994), 'situational' or 'contextual' factors refer to external pressures suffered by an individual that encourage or discourage particular types of behaviour.

[4] Ford and Richardson (1994) define 'individual' factors as those attributes determined by birth (for example, sex or age) or by the circumstances of one's birth (for example, religion or nationality).

[5] Crown and Spiller (1998) claim that researchers have been interested in the effectiveness of honour codes since at least the 1930s.

[6] The institutions surveyed constituted a convenience sample of Australian universities, based on proximity to the authors' own institution. The institutions involved agreed to participate on the basis that their names would not be disclosed.

[7] In accordance with the ethical approval received for the project, the responses were received (by mail) in a return address envelope that was supplied in the original mail out, which could not identify the respondent or their institution.

[8] Six additional responses were received, however these were returned indicating that the academic was no longer with that institution.

[9] A prepared announcement was read out in all classes that outlined the project and the project team. This ensured that each group of students was given the same information about the project. In many cases the lecturer also supported the project and encouraged students to participate.

[10] While demographic data is provided in Tables 1 and 2, analysis on demographic variables has yet to be conducted and will constitute a later study.

[11] The actual survey instruments were developed and piloted by colleagues carrying out similar research in New Zealand (de Lambert, Ellen and Taylor 2003).

[12] The finding that staff view falsification of research results extremely seriously is not surprising, given that academic staff performance is often judged according to (and promotion contingent upon) research publications. Whilst we acknowledge

that 'research' may not be common semantic space for students and academics, this does not detract from the relevance of our findings

[13] Since actual frequencies are based on student self-reporting, it is possible that these numbers are biased downward by students' unwillingness to admit wrongdoings. Given that staff-estimated frequencies tend to be considerably lower than self-reported frequencies, we feel this potential understatement of actual frequencies does not present a problem with respect to the interpretation of our findings.

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