

18TH ANNUAL PACIFIC-RIM REAL ESTATE SOCIETY CONFERENCE

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**ACADEMIC INTEGRITY: ACHIEVING GOOD PRACTICE IN UNDERGRADUATE PROPERTY
AND PLANNING PROGRAMS THROUGH ONLINE TUTORING**

Clive M J Warren¹, Ann Peterson², David Neil²,

1 University of Queensland Business School

2 School of Geography, Planning and Environmental Management

The University of Queensland Australia

c.warren@uq.edu.au

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ABSTRACT

Educational institutions globally are grappling with the rising incidence of academic misconduct, in part fuelled by the ever increasing access to online information. Recent audits of universities in Australia (AUQA 2009) indicated that students believed that their institutions did not have the necessary strategies in place to dispel students' perceptions that plagiarism may be tolerated. This paper reports on the development of teaching tools within Property, Planning and Environmental Management programmes at the University of Queensland. The objective of an online tutorial tool was to improve students' understanding of academic integrity and good academic practice and to do so in a supportive teaching and learning environment, through the development of an online interactive tutorial. The aims of the tutorial were to: develop learners' skills in knowing when to reference information and thus avoid plagiarising in their academic work; provide accurate information in an interesting, relevant and interactive way; ensure relevance to the institution's diverse student body; incorporate the ability to assess students' understanding of good academic practice; and ensure that the tool would be accessible as a learning resource for students throughout their programs of study.

Through pre and post implementation surveys the changes in student perceptions of good practice are identified and used to refine the tutorial tool. The results of the study among students seeking to enter the planning and property professions has demonstrated a lack of clear understanding as to what constitutes poor academic practice. This finding matches the observation among academics that much of the plagiarism detected in students' academic writing is as a result of poor understanding or practice rather than a deliberate attempt to deceive. Finally the paper reports on the adoption of the teaching tool on a university wide basis and its compulsory application to over 20,000 students.

INTRODUCTION

This paper investigates issues of academic integrity within the property and planning courses in Australia and in particular the steps taken at University of Queensland to address the perceived increase in the incidence of poor academic conduct. Universities offer a wide range educational programs many of which are vocational leading graduates into careers which invariably require membership of professional institutions. Many of these courses seek accreditation of their programs by professional bodies in order to ensure that students can seek to attain membership after graduating. The property and planning professions including the Planning Institute of Australia (PIA) Australian Property Institute (API) and the Royal Institution of Chartered Surveyors (RICS) are among those

which accredit many of the programs in Australia including those offered at University of Queensland. Each of these professional bodies seek to maintain high ethical standards among their members and each publishes a code of ethics by which members are required to abide (API 2008; PIA 2002; RICS 2008). These ethical codes require that members 'practise their vocation with integrity, honour and professionalism' (API 2008). An issue emerging from the relationship between the professional bodies and the university is one of the ethical standards of students as they enter the profession with a study of UK property employers rating professional practice and ethical standards in the top five attributes they seek in graduates (Poon et al. 2011).

Academic integrity and good practice are central to student learning and to professional life after graduation. The ability to apply critical reasoning to issues through independent thought and informed judgement are key attributes that universities seek to instil in their students. The occurrence of poor academic practices and plagiarism in educational institutions and workplaces has been an issue of increasing concern in recent times. Studies by McCabe and Trevino (1996) reported on a longitudinal study of university students in the USA which showed a marked increase in the reported occurrence of plagiarism over the 20 year study period. A staggering 54% reported copying material without proper citation and 26% deliberately plagiarised the work of others.

This paper describes the steps taken to reduce poor academic conduct within the Planning and Property programs at the University of Queensland. Many universities have developed policies and procedures to deal with plagiarism these largely punitive measures that have mainly addressed the consequences of poor practices resulting in loss of grades or a fail grade for the course. A more pedagogically sound approach is based on a proactive intervention which raises awareness and knowledge of good academic practices, and provides the necessary tools to avoid unintentional poor practice allowing students to demonstrate academic integrity. Our research indicates a significant improvement in the level of students understanding of academic integrity and resultant reduction in the incidence of reported cases of plagiarism following completion of the student intervention.

THE EDUCATIONAL PROBLEM

Plagiarism is the act of misrepresenting as one's own original work, the ideas, interpretation, words, images, designs, or creative works of another (The University of Queensland [UQ], 2008). A more student-centred definition is provided by Park (2004) stating plagiarism to '...be the unacknowledged use of someone else's work, usually in coursework, and passing it off as if it were one's own'. Examples of plagiarism include: direct copying of paragraphs, sentences, a single sentence or significant parts of a sentence without appropriate acknowledgement; a 'cut and paste' of statements from multiple sources; and simply rearranging another person's words or ideas without changing the basic structure and/or meaning of the text and without appropriate acknowledgement. It is however generally accepted that plagiarism excludes what would normally be regarded as general knowledge. This then raises the issue within any given field of academic study as to what is general knowledge for that discipline and who decides what is or is not general knowledge. In addition, how much needs to be copied to be plagiarism? What amount of restructuring of text renders it 'new'? Is copying a few words, a sentence, a paragraph or a whole article the point at which the plagiarism alert sounds? (Park 2003).

Plagiarism is a major issue in many institutions (James et al. 2002; Park 2003; Sutherland-Smith 2008) and increases in the apparent prevalence of plagiarism are related to a number of factors including: the easy availability of on-line information; the ease with which students can 'cut and paste' information from numerous web sources; the ability to easily download academic papers for free or at a small cost together with dedicated organisations which actively sell assignments on a range of subjects (Evans 2000; Thompson et al. 2002), time pressures students face in meeting assignment deadlines; the use of group work which may have led to an increase in student's plagiarism of each other's work; increasing class sizes, with reduced access to staff; and increased reliance on past student work (James, McInnis & Devlin, 2008).

18TH ANNUAL PACIFIC-RIM REAL ESTATE SOCIETY CONFERENCE

ADELAIDE, AUSTRALIA, 15-18 JANUARY 2012

There are numerous papers published over the past decade which indicate that the problem of plagiarism is on the rise. In the UK Park (2004) Carroll (2004) and Larkham et al (2002) each discuss the rise in poor academic practice and the need for institutional change to meet this challenge. Studies in the USA have similarly identified a marked increase in the occurrence of plagiarism. The longitudinal study by McCabe and Trevino (1996) over a twenty year timeframe indicated a substantial rise in student reported poor academic practice across an range of measures in both examinations and assignments. Roberts (2008) among others refer to a rising incidence of plagiarism in both the workplace and educational institutions and in part attributes this change to the ease of access to material via the internet. In the Australian context, the Australian Universities Teaching Committee (AUTC) (2008) indicates that while it is impossible to determine trends in the incidence of plagiarism in higher education institutions, it appears to be widespread, and occurs across a range of disciplines.

The incidence of plagiarism and the perception among students that poor academic practice and plagiarism is tolerated in universities has been an issue raised by the Australian Universities Quality Agency (AUQA) in a number of its audits of Australian Universities. In an audit of The University of Queensland the agency observed that; 'The University also needs to address a concern held by students in some schools that plagiarism or copying is tolerated, a matter that AUQA recommends be addressed in the University's forthcoming review of its policy on plagiarism' (AUQA 2009). - It is recognised that a contributing factor to student perceptions of university tolerance of plagiarism can be attributed to a lack of clear understanding among students as to what constitutes plagiarism. It is recognised that a contributing factor to student perceptions of university tolerance of plagiarism can be attributed to a lack of clear understanding among students as to what constitutes plagiarism. Many cases of alleged misconduct can be attributed to misunderstanding and ignorance among students about why they should avoid plagiarism and how they can do so (AUTC, 2008).

The response to the AUQA audit and potential misconceptions of students as to the nature of what constitutes plagiarism has been to increase staff and student awareness of the universities' policy on academic misconduct and to implement university wide training for all students.

DEVELOPING A RESPONSE

Prior to the AUQA Audit in 2009 the incidence of poor academic conduct had been recognised within students undertaking planning and property degrees within the School of Geography Planning and Architecture at the University of Queensland. A major contributor to the identification of this problem has been the widespread adoption of plagiarism detection software within a number of courses. Tools such as TurnItIn automated the detection of poor academic writing and of blatant plagiarism. This led to the development of an enhanced School Protocol for dealing with individual cases of plagiarism with clear guidelines for escalation of disciplinary action based on the level of seriousness of the act of cheating. In reviewing individual cases of poor academic practice it became readily apparent that in many cases students were not deliberately seeking to cheat but rather, were inadvertently falling foul of plagiarism detection efforts due to poor or inadequate understanding of good academic writing practices. It was also apparent that there was some considerable variation among students understanding of good academic practise based on their education to date with many overseas trained students in particular, appearing to have a much less developed understanding of the process of academic writing within Australian universities.

In order to address the lack of understanding among students a training module was developed. The rationale behind development of this tool was to ensure that all students entering the property and planning programs would be required to undertake a training tutorial and to record a minimum pass mark to demonstrate understanding of the module. On completion of the training module all students should have a sound understanding of good academic practices and as a consequence any detected misconduct after completion of the module could more readily be attributed as a deliberate attempt to gain advantage rather than be blamed on a lack of understanding.

A comprehensive online training module was developed over a two year period with assistance from professional programmers and experts in instructional design. The intent was to create a user friendly

format which engaged students in various online exercises aimed at developing their understanding of issues of copyright, proper academic referencing together with aspects of collaboration and collusion in preparing academic assignments (Peterson et al 2010; Peterson et al 2009). The module provided for interactive engagement with students using a number of response tools from simple radio buttons or yes/no responses through to requiring input of full bibliographic references in either Harvard or Chicago styles. Each section of the tutorial responses was evaluated and students were unable to proceed until an adequate score was attained. The student's final score was recorded as a record of completion of the tutorial. The module was initially implemented as a pilot in selected first year planning and property program courses. Following a number of software design enhancements the module was implemented for all students within the School of Geography Planning and Architecture and for students entering the Business School program in property and real estate development (Peterson, Neil, et al. 2009).

VALIDATING THE RESPONSE

Methods:

In order to validate the development of the training module a number of student surveys were developed and administered in order to gain an understanding of student attitudes and knowledge of good academic practice. The questionnaires were administered online and provided an anonymous vehicle by which to obtain frank and honest feedback from a large cohort of students in their first semester at university. The cohort of first semester students was targeted in order to gain an understanding of the level of knowledge and understanding of students entering university. The survey instrument comprised of 50 questions with most questions adopting a five point Likert Scale which seeks responses ranging from strongly agree to strongly disagree with a central neutral, neither agree nor disagree. A second group of questions provided referencing examples and asked participants to identify if these were correctly applied. A third group of questions sought some personal information relating to gender, age, primary language and entry score to the program. These latter questions were used to identify any differences in responses from these different groups.

The survey was distributed to 447 students across three planning and property courses. A response rate of 35% was achieved with 157 valid responses received. A second survey was distributed to all students that had successfully completed the online tutorial during the semester in order to identify any changes in student's attitudes to good academic practice. The second follow-up survey was distributed to 260 students and achieved a 20% response rate with 52 valid surveys returned. Due to issues of student anonymity it is not possible to identify those students that completed both the first and second survey, however with sufficient responses in both the pre and post tutorial survey the results will be generalizable for the whole cohort.

Results:

Analysis of the initial survey data, with 157 responses provides a sound basis on which to start to understand the main issues relating to good academic practice. It is perhaps not surprising that most students agreed that plagiarism included: paraphrasing or summarising someone else's work and not citing them as the source. In response to this question 95.5% agreed or strongly agreed with just 3.1% neutral or did not know and 1.3% not believing this to be plagiarism. Thus there is a high level of recognition of what constitutes plagiarism at the most basic level but when asked a question about rephrasing a paragraph of text by changing a few words 60% of students considered that this was acceptable if the source author was quoted, while just 27% recognised that this was still effectively a direct quote and should be recognised as such. When asked about taking an original idea from a text and putting it in their own words, thus expressing others original ideas but in their own words 25% did not consider this to be plagiarism with a further 22% not able to decide. A similar question relating to using elements of a design from a third party and incorporating these in their work was not considered to be plagiarism by 85% of students.

The use of the internet has pervaded all levels of education and the ease with which text and images can be readily cut and paste into assignments has led to a significant increase in the incidence of this type of plagiarism. Students were asked if the use of text, cut and pasted from websites, is a serious

18TH ANNUAL PACIFIC-RIM REAL ESTATE SOCIETY CONFERENCE

ADELAIDE, AUSTRALIA, 15-18 JANUARY 2012

issue of plagiarism and 27% did not consider this to be a serious issue of poor academic practice with a further 13% not knowing if it was or not.

Similar question relating to the use of images or diagrams from the internet showed an even greater likelihood that students would use these considering it not to be serious poor conduct or even plagiarism.

While there appeared to be a reasonable level of recognition of the more obvious forms of plagiarism many students still maintained an attitude that it was acceptable or just part of academic life to copy others work. Nearly 20% of students agreed that it is easier for them to plagiarise than spend the time needed to undertake the work properly themselves. Although very few considered that they would purchase an assignment over the internet and make minor changes, just 1.5%. Most students, 82% thought that they could not get away with plagiarism in their course with just 2% believing that they could. However 7% of students believed that their peers think that it is acceptable to copy others material. Perhaps not surprisingly 99% of respondents recognised that cheating in exams was a serious matter, highlighting a marked difference in perception and attitude between cheating in examinations and cheating in written assignments.

While the evidence from the student survey shows a reasonable level of comprehension of the issues relating to good academic practice there are a number of students that either did not know or did not fully understand what plagiarism was. Students presented with short sentences with either correct or incorrect citation were in many instances unable to determine if the citation was correct with between 30% and 40% of students not correctly identifying the correct citation.

The evidence presented by the initial survey was, in part, used to support the design of the online tutorial and inform the type of issues which needed addressing within the teaching tool. Students in the first year programs were re-surveyed at the end of the first semester in order to evaluate any changes in their understanding of what constitutes good academic practice. Using a similar online survey instrument the answers from the pre-tutorial survey were compared with the post-tutorial survey. The results show that students understanding of what constitutes poor academic practice had increased. The response to the most basic question relating to plagiarism including paraphrasing or summarising others work without citation showed a positive shift of 8.2% in the mean Likert score for those agreeing that this is plagiarism. More significantly, a change occurred from just 38% strongly agreeing in the pre-survey to 79% strongly agreeing in the post-survey for this base level question. Similar increases in the mean score of 10% were achieved for questions relating to copying in group work, recycling of assignments and use of others ideas without recognition. These results clearly demonstrate that student understanding of plagiarism has been considerably enhanced through the implementation of the online training tool.

The second element of the pre and post tutorial surveys were the presentation of short sample citations in which students were asked to indicate if the passage provided had been correctly cited. This section of the survey was designed to test whether students had a comprehensive understanding of proper citation using the Harvard Author / Date format which is the stated preferred citation format within the planning and property programs. There were eight separate paragraphs containing a citation presented to participants and they were simply required to identify if it was or was not a correctly formatted citation. Results for individual questions in the pre-survey ranged from 53% to 90% answering correctly with the mean correct score of 68%. This shows that 30% to 40% of students are not competent to identify a proper citation of a source document and, by inference, would not be able to properly cite the source in their academic writing.

In the post-survey the range of correct answers to the proper citation of sources within the eight sample questions was from 60% to 87% with a mean across the 8 questions of 71%. Thus students' performance in identifying correct in-text citation had only increased by 3% in the post tutorial testing. Thus almost a third of students remain unable to properly identify proper citation of source documents and are thus likely to make errors in their own writing.

18TH ANNUAL PACIFIC-RIM REAL ESTATE SOCIETY CONFERENCE

ADELAIDE, AUSTRALIA, 15-18 JANUARY 2012

The results demonstrate an improvement in students' understanding of what constitutes poor academic practice following on-line training and testing. The results do not show a large increase in students' ability to correctly identify in-text citation, showing that there is a need to further reinforce this aspect of the training.

The success of the training tutorial as both a tool for enhanced student learning and as a means of ensuring that all students are aware of the Universities' policy on Plagiarism has been recognised. Following the pilot application of the survey instrument and training tutorial, the program was subsequently made compulsory for all students undertaking courses at both undergraduate and post graduate levels in the property and planning programs. Following further enhancements to the tool to remove its focus from the fields of planning and property to more generic writing the tutorial was made compulsory for all students studying at the University of Queensland in 2011. Further evaluation of the program is being undertaken with surveys of over 20,000 students being undertaken.

CONCLUSIONS

The incidence of cheating and poor academic conduct among university students has been increasing in recent years. The increase in cases of plagiarism is variously attributed to the ease with which material can be copied from web sources through to the increasing time pressures placed on students. Recognition of this growing problem among students studying to enter professions where honesty and integrity are fundamental values required in professional practice is of concern to both the academic community and to the broader profession. The results of this study among students seeking to enter the planning and property professions has demonstrated a lack of clear understanding as to what constitutes poor academic practice. This finding matches the observation among academics that much of the plagiarism detected in students' academic writing is as a result of poor understanding or practice rather than a deliberate attempt to deceive. The educational intervention developed as part of the property and planning programs at University of Queensland has been successful in raising student awareness of the issues related to poor academic practice; however as the results show there is still a need to increase student skills further in the use of proper citation. This initial research has validated the development of the teaching tool and led to its adoption on a university wide basis in 2011. There is a need for much more in-depth research into the reasons for poor academic practice among students and in particular further evaluation of the benefits of a program such as that implemented in our courses. Further analysis across a wide group of students and subject disciplines is currently underway and will be evaluated against the increasing use of plagiarism detection software which is increasingly becoming a compulsory element in university assignment evaluation.

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REFERENCES

API 2008, *Professional Practice 2008*, Sydney.

AUQA (2009), *Audit Report Number 74 - Report of an Audit of The University of Queensland*, Australian Universities Quality Agency, Melbourne.

AUTC 2008, *Minimising Plagiarism*, Australian Universities Teaching Committee, August 2011, <<http://www.cshe.unimelb.edu.au/assessinglearning/docs/PlagMain.pdf>>.

Carroll, J. (2004), *Institutional issues in deterring, detecting and dealing with student plagiarism*, Oxford Brookes University, Oxford.

Evans, J. A. (2000), 'The New Plagiarism in Higher Education: From Selection to Reflection', *Interactions*, vol. 4, no. 2.

18TH ANNUAL PACIFIC-RIM REAL ESTATE SOCIETY CONFERENCE

ADELAIDE, AUSTRALIA, 15-18 JANUARY 2012

James, R., McInnis, C. & Devlin, M. (2002), *Assessing Learning in Australian Universities. Ideas, strategies and resources for quality in student assessment.*, Centre for the Study of Higher Education - The University of Melbourne, Melbourne.

Larkham, P. J. & Manns, S. (2002), 'Plagiarism and its Treatment in Higher Education', *Journal of Further and Higher Education*, vol. 26, no. 4, pp. 339-49.

McCabe, D. L. & Trevino, L. K. (1996), 'What we know about cheating in college: Longitudinal trends and recent developments', *Change*, vol. 28, no. 1, pp. 28-33.

Park, C. (2003), 'In Other (People's) Words: plagiarism by university students—literature and lessons', *Assessment & Evaluation in Higher Education*, vol. 28, no. 5.

---- (2004), 'Rebels Without a Clause: towards an institutional framework for dealing with plagiarism by students', *Journal of Further and Higher Education*, vol. 28, no. 3.

Peterson, A., McGrath, D., Neil, D. & Warren, C. M. J. (2010), 'Improving Academic Integrity - An Institutional-scale Innovative Online Learning Approach', paper presented to Proceedings of World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education, Orlando, Florida, USA, 18 October.

Peterson, A., Neil, D. & Warren, C. M. J. (2009), 'Academic Integrity: Referencing and avoiding plagiarism using an interactive E-Learning tool', paper presented to 22nd International Conference on The First-Year Experience, Montreal, Canada 20-23 July.

Peterson, A., Neil, D., Warren, C. M. J., Johnston, S. & Petherick, L. (2009), 'Development, implementation and evaluation of an on-line interactive learning resource to enhance academic integrity and reduce the incidence of plagiarism', paper presented to Seventh Annual Hawaii International Conference on Education, Hawaii, 3-7 January, <http://www.hiceducation.org/proceedings_edu.htm>.

PIA (2002), *Code of Professional Conduct*, Planning Institute of Australia, Canberra.

Poon, J., Hoxley, M. & Fuchs, W. (2011), 'Real estate education: an investigation of multiple stakeholders', *Property Management*, vol. 29, no. 5.

RICS (2008), *Red Book*, 6 edn, RICS, London.

Roberts, T. S. (2008), *Student plagiarism in an online world: problems and solutions.*, Hershey, PA.

Sutherland-Smith, W. (2008), *Plagiarism, the Internet, and student learning : improving academic integrity*, Routledge, New York.

Thompson, B. J. & Thompson, S. C. (2002), 'University Research, Plagiarism and the Internet: Problems and Possible Solutions', paper presented to ETHICOMP, Lisbon, Portugal, November 13-15.