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Plagiarism: let the policy fix the crime

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PLAGIARISM:
LET THE POLICY FIX THE CRIME

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ABSTRACT

Plagiarism is considered to be an unacceptable act, a crime, in today’s University. This is reinforced by the Latin and Greek origins of the word, i.e., meaning to ‘plunder’ or ‘kidnap’. An Australian Vice-Chancellor was recently asked to resign following public allegations and findings of his plagiarism. Universities adopt and publicise policies to illustrate what they expect from their students. We posit that while some students plagiarise for reasons endogenous to those students, others do so as a result of poorly designed and constructed assignments and assessment tasks. From a simple example involving the use of the plagiarism detection software program, “Turnitin” and 50, 2nd year Accounting students’ essays, we find the demonstrated level of ‘originality’ and ‘research’ as acceptable for the task the students had been set. However, we conclude that those responsible for formulating and setting assessment tasks require greater consideration of issues of cognitive development and complexity.

Keywords: Plagiarism, Bloom’s Taxonomy, Policy, Cognitive Complexity.
INTRODUCTION:

Plagiarism is considered an unacceptable act in today’s University. Definitions of what constitutes plagiarism vary but perhaps a consensus can be drawn from The Shorter Oxford English Dictionary (2002, pp 2226-2227) The verb plagiarise [plagiarize] is defined as (to) take and use another person’s (thoughts, writings, inventions…) as one’s own, without attribution. That sense of it being a dastardly act is reinforced by the origins of the word as it appears to emanate from the Latin, plagiari/ius, a plunderer or kidnapper and the Greek word, plagion, also meaning kidnapper. To kidnap or plunder is a crime in most legal systems and plagiarism is dealt with much like a crime, in the contemporary university.

A search at the website http://www.google.com using the key words, ‘plagiarism, academic, integrity, and University’ yields over 73,000 ‘hits’. Clearly, there is much written about plagiarism and what constitutes plagiarism. From our investigations into the subject, far less is written about what is done with, to, and for those involved, when plagiarism in someone’s work is detected. We also note that plagiarism is not only an issue for students but also for staff undertaking research and teaching within the University or college environment.

HOW SOME UNIVERSITIES ADDRESS PLAGIARISM

We believe that Princeton University is a highly selective institution and enrolls only the brightest and the best students. While it is not a very egalitarian or politically correct position, our collective 75 years of experience in tertiary education as teachers, researchers, and students indicates to us that ‘smart kids who are highly motivated do better than dumb ones who don’t work very hard’. However, even the ‘smart’ students need to know what constitutes plagiarism.

Princeton University’s working document[1] is one of many that give concrete illustrations of what might constitute plagiarism and what constitutes paraphrasing in both written text and computer program assignments.

The Princeton website also contains information about why writing and original work are important in a student’s tertiary education.

During the course of your Princeton education, you will be exposed to the ideas, scientific theories, and creative works of countless scholars, scientists, and artists. Inevitably, your own ideas will be shaped by the words and ideas that you encounter. The intellectual challenge you face in your academic work is to go beyond what you learn in your textbooks, in lectures, and in the library -- to evaluate, rethink, synthesize, and make your own the information, data, and concepts you find in your sources. The greatest satisfaction of academic work comes from making something original, genuine, and new out of the material you have learned in your courses and discovered in your research. Doing original work is the most demanding, but also the most rewarding, part of your Princeton education[2].
Arguably, full time students in highly selective Universities are also more likely to be unencumbered by work or family duties and financial worries. Students in these Universities are also able to devote more, if not most, of their energy and time to their studies and interactions with peers and those associated with the University community. It would appear as though ‘time on task’ for written assignments is less of a problem for full time students than it might be for some enrolled in a more ‘working class’ University, where many students are ‘part time students’ with greater or more onerous work, family duties and financial commitments.

Alternatively, part time students generally have more ‘real world’ experiences that add to their academic knowledge. Many part time students pay their own way through their University programs and expect a return on their time and money investment. Indiana University is an institution with a different student demographic to that of Princeton. Nevertheless it also considers acts of plagiarism to be very serious violations of integrity and therefore misconduct.

Indiana University’s SCS Student Handbook’s section on Academic Honesty contains the following section on plagiarism.

“Plagiarism is a special kind of cheating in which you basically steal someone else’s work and present it as your own. If you use the ideas, words, or statements of another person or source to support your ideas, you must always give credit to the person or source. If a course instructor detects plagiarism in a written assignment or exam, the instructor may recommend – depending on the severity of the plagiarism – which you receive:

- A reduced grade for the written assignment or exam.
- No credit for the written assignment or exam.
- A reduced grade for the entire course.
- A failing grade for the entire course (forfeiting all course fees)\(^{[3]}\).

Other Universities’ websites also define and explain what constitutes plagiarism. For example, Drexel University’s “Student Live” reports:

‘Plagiarism

No student shall engage in an act or an attempted act of plagiarism, which is defined as the inclusion of someone else’s words, ideas, or data as one’s own work. When a student submits work for credit that includes the words, ideas or data of others, the source of that information must be acknowledged through complete, accurate, and specific references, and, if verbatim statements are included, through quotation marks as well. By placing his/her name on work submitted for credit, the student certifies the originality of all work not otherwise identified by appropriate acknowledgments\(^{[4]}\).

The emphasis here, and in other documents, is with referencing, quotation, and originality of expression and these three examples demonstrate a consistent approach to the view and treatment of, as well as attitudes to, plagiarism and academic integrity.
We may assist our students by referring them to the many books on essay writing that appear on library shelves and for sale in academic bookshops. For example, Clanchy and Ballard (1997, p. 85) in mentioning ‘References’, remind the reader that he or she must “acknowledge your source”. Formatting instructions for referencing are given elsewhere in the book.

Crème and Lea (1997, p. 66-69) provide a concise discussion of “Reading, referencing and plagiarism” and insist, “One of the ‘rules’ of academic writing is that you always attribute ideas that ‘belong’ to somebody else”. Experience suggests that students often do not make use of these writing manuals. Only those students motivated enough to consult them and follow their advice can expect to benefit.

So, how ‘original’ do we expect our students to be and how do responses to plagiarism relate to learning and cognition? We believe that there is sufficient evidence in the literature of learning and cognition to conclude that the level of the task required and the level of cognitive development of the ‘student’ both individually and collectively plays a major role in problems revolving around plagiarism and originality.

While we acknowledge that, so far, we have concentrated on plagiarism by students, we should note that academics (often at the most senior levels), when accused of the this act, may suffer damning publicity, even on a national basis, and (to use a hackneyed phrase) endure ‘trial-by-media’ before a formal investigation of allegations has been undertaken.

We should also recognise that formal investigations may take many forms, and institutional staff or officers delegated the responsibility of investigating allegations need certain skills to determine whether there was both actual plagiarism and an intention to commit the act. Whereas, those who investigate crime need to establish motive, as educators, we seem less concerned with this issue. So, as far as crime is concerned, in legal circles 'actus non facit reum, nisi mens sit rea’ [the act itself does not constitute guilt unless done with a guilty intent]. In the University however, a mens rea may not be mandatory for findings of guilt where plagiarism is concerned. Accordingly, during investigations, there may be less emphasis on determining the motives that drive students and academics to commit such acts.

What is it that encourages students (or academics) to plagiarise? Is it the pressure of their study regime or work commitments? Is it the belief that the risk of detection is low, manageable or negligible? Is it their lack of understanding or acknowledgment of the opprobrium that attaches to the act? As for that opprobrium, does it arise from a genuine or manufactured sense of outrage on the part of other students or academics, or do we all give a sigh of relief that we are not being the ones being accused?

**PLAGIARISM IN THE MEDIA SPOTLIGHT**

Regarding the degree of opprobrium that attaches to this act, a recent incident in Australia involving a vice-chancellor of an Australian University illustrates how the issue of plagiarism can be publicised and dealt with in the media.
In July 2002, Professor David Robinson, then Vice Chancellor and President of Monash University, in the State of Victoria, Australia, was asked to resign following allegations of plagiarism. The electronic version of Victoria's daily broadsheet newspaper, The Age, reported the event in the following terms;

“MONASH FORCES ITS CHIEF TO QUIT
By Misha Ketchell
July 12 2002[5]

The head of Australia's largest University has been forced to resign over claims that he is a repeat plagiarist.

David Robinson, the embattled vice-chancellor of Monash University, yesterday agreed to quit his job after he was summoned home by chancellor Jerry Ellis from a trip to London.
"He could see he was creating damage for the University. The only solution that he could see, and I could see, and we came to this together, was to leave," Mr Ellis said after an hour-long meeting with Professor Robinson.

Three weeks ago The Times in London revealed Professor Robinson had admitted to plagiarism in books published in 1979 and 1983. Professor Robinson said both incidents had been dealt with years ago.

Last week William Webster, a Monash researcher and vice-president of the Association for the Public University, presented a new claim of plagiarism in Professor Robinson's 1976 book From Drinking to Alcoholism.
Professor Robinson conceded he had not adequately acknowledged work he was drawing on, but claimed the mistakes were inadvertent and due to pressure to publish.

Asked whether he was forced to take action by rumours of a fourth plagiarism allegation, Mr Ellis yesterday said: "All I can tell you is that it's been drawn to my attention that there are a number of allegations. But as I say, all of that is quite irrelevant, because we've decided to part."

Professor Robinson, 60, was recently signed up for another five-year term, which was not due to expire until the end of 2006. He may be eligible for a payout of more than $1 million.

Mr Ellis said details of the settlement were yet to be negotiated but Professor Robinson had fulfilled the terms of his contract and would not be penalised for his early departure.

"Bear in mind that Professor Robinson has done an excellent job at this University. He has met all of his objectives. We've transformed the University. He has been an outstanding vice-chancellor, it's just a great pity that this has happened."
Monash would immediately call a council meeting and begin the search for a new vice-chancellor, Mr Ellis said. He also confirmed that the University was reviewing its selection procedures.

Professor Robinson yesterday declined to be interviewed but said in a statement he was disappointed to be leaving Monash at such an exciting time in its development.

"However, I have every confidence that the deans will continue with the enormous progress we have already made together."

The president of the Monash Student Association, Rebecca Tomilson, said Professor Robinson's conduct had damaged the University's reputation and it was right that he be asked to leave.

The acting president of the Monash branch of the National Tertiary Education Union, Dale Halstead, said Professor Robinson should not receive a large payout for behaving badly.

"In terms of the future of staff and students this is really going to indicate that the kind of values that are important will prevail," she said.

Colin Honey, an ethicist based at Cambridge University, said Professor Robinson had been sacked too quickly and it appeared public relations concerns had been put before fair treatment."

While instances of this type, at the most senior level of University governance, may be rare, that they exist at all confirms the steps that some people and organisations will take to uncover, publicise and prosecute plagiarism.

THE IMPORTANCE OF WRITING IN ACCOUNTING AND FINANCE

As educators, we believe that one of the objectives of accounting and finance is to transmit information to users. We believe that who the user of the information is, in other words whether the users are internal or external makes little or no difference to the style or form of the messages or information transmitted to the users. Galvin and Juchau (1983, p. 3 conclude that:

“Communication skills are necessary for the successful discharge of staff accountants’ duties. ...Educators support formal oral presentation and outline development; practitioners look for formal report writing. Chartered Accountants agree that correspondence writing, listening responsiveness, correct grammar and spelling, coherence in verbal presentation and paragraph development.”

A search of http://www.google.com[6] using the key words ‘importance, writing, finance and accounting’ yields 688,000 ‘hits’. There appears to be more than passing interest in the study and application of writing, and its importance in accounting and finance. Adding the word University to the search reduces the number of ‘hits’ to 284,000.
Coleman et al \cite{7} report:

Accounting is frequently referred to as the language of business. Effective use of words is critical in interpreting and communicating numerical information and is an essential component in all accountants' jobs.


stated that entry-level professionals should exhibit proper grammar, appropriate style and tone, logical organization, clarity, and conciseness.

Stanek (1990 cited Coleman et al, 2002) suggested that

It is common knowledge, in the business environment, that today's accounting graduates are judged on both their communication and technical skills, with both skills being given equal importance

MORE ABOUT THE IMPORTANCE OF WRITING ‘ESSAYS’

Our experiences indicate that almost everyone connected with the academy believes that learning to present one's thoughts in writing is essential. Roy and MacNeill (1967, p. 180) indicate that ‘written and oral English’ is the highest ranked requirement for accounting students who want to become Certified Public Accountants. Roy and MacNeill continue (1967, p. 193) “(T)he beginning CPA in his (sic) role of a professional specialist should be thoroughly familiar with the following: The communication of accounting information: statement presentation for maximum utility and clarity”.

Birkett (1989a, p. 43) reports that the following skills were identified as the most important in the practice of management accounting.

- The ability to determine the critical factors in a situation.
- Exercising judgment about what information is important to an organization for problem solving, and
- Communication and interpersonal skills.

Birkett (1989b, p. 26) in a parallel study reports that professional accounting graduates should have the following qualities.

- The course should develop in students an ability to ‘think for themselves’ (rote learning should not be encouraged).
- The course should develop the knowledge and skills necessary for ‘effective interpersonal communication’.

While these studies may be considered dated, we believe that the general purpose of accounting and finance remains the same. Graduates from accounting and finance programs /
courses must be able to communicate both in writing and verbally with others who may use their outputs as inputs to decision models. Students are asked to demonstrate ‘academic’ writing in their essays. Students are alerted to the rules regarding attribution in academic writing. Applying those rules presents a problem for them to solve. How can students write in an ‘academic’ form without breaching the rules relating to plagiarism? Gagne (1970) suggests that rules are learned in order to be put to use in problem solving situations.

Gagne (1970, p. 215) illustrates a problem solving approach to writing in the following:

“The sequence of events involved in problem solving… is often referenced to the writings of Dewey (1910). The initial event is the **presentation of the problem**, which may be done by a verbal statement or otherwise. The learner then **defines the problem**… he distinguishes the essential features of the situation. As a third step, he **formulates hypotheses** which may be applicable to a solution. Finally, he carries out **verification** of his hypothesis or of successive ones, until he finds one that achieves the solution he seeks.

Accordingly, learning, rules and problem solving can collide in the process of writing.

**WHY MIGHT STUDENTS CHOOSE TO PLAGIARISE?**

We gain some insight from the Carnegie Mellon University Academic Integrity Brochure. Their discussion of integrity and ownership is revealing.

Students recognize the obvious examples of academic dishonesty such as copying during an exam or quoting extensively without a citation. They can be much less clear on how much collaboration is allowed, what kind of paraphrasing is appropriate to summarize a source or whether one assignment can be turned for two different classes. If students are not accustomed to thinking about the ownership of ideas, then they tend to underreport their sources.

... Fear of failure and low self-esteem can contribute to dishonest behaviour. When students see these behaviours as consistent with their negative feelings about themselves, there seems to be little to lose by cheating. When facing a deadline some students choose to plagiarize rather than take a chance on performing poorly. Afterwards, guilt and feelings of disappointment can feed already low self-esteem, further increasing the likelihood of dishonesty in the future[^8].

We believe that there are many reasons why students’ might plagiarise. Some of the reasons are endogenous to the student such as those suggested above. The motive for the crime is explained by a notion of dishonesty. But some exogenous influences are more a result of the instructor and / or the system. If instructors give writing assignments that are not understood by the students or are too difficult for the students, then we believe that students will copy or ‘lift’, with or without the benefit of quotation marks. These outcomes, in our view are undesirable. We could even be accused of being ‘agent provocateurs’, complicit in setting traps for the pressured student. What does it say about our commitment to student learning if we, as instructors, could be accused of entrapment? Even if the students properly quote the citations, is there any evidence that ‘learning’ has taken place? Or has the student merely...
We are strong believers in the ‘staged’ like cognitive development theories advanced by Piaget (See Furth, 1969), Gagne (1970), Bloom (1954) and Perry (1968). Bloom’s (1954) work would appear to be very relevant to the cognitive level of difficulty of work assigned to students. Perry’s (1968) work follows along similar lines. When integrated, the level of task advanced by Bloom and the stage of cognitive development of the student give us a powerful tool in addressing the problems of plagiarism in our University academic programs, subjects and courses.

PLAGIARISM AND THE ROLE OF LEARNING AND COGNITION AND ‘STAGED’ DEVELOPMENT

We believe that Bloom’s Taxonomy of Educational Objectives (1954) gives us a strong guide to what we should expect our students to be able to do. Bloom presents the following taxonomy containing six major classes. These classes are in order of increasing complexity.

1. Knowledge
2. Comprehension
3. Application
4. Analysis
5. Synthesis
6. Evaluation

Stages 1 through 3 are generally referred to as the ‘memory’ stages and Stages 4 through 6 as the ‘thinking’ stages. As in any taxonomy or staged development theory, in order to be able to do tasks at a higher stage, the person must be able to perform relevant tasks at a lower stage. In simple terms, one must be able to stand before one can walk, and one must be able to walk before one can run. In a rational and logical curriculum one must be willing to spend time and energy helping students develop the ‘tools’ or memory skills in order to analyse, synthesise and evaluate problems and make decisions.

Essays and written assignments at ‘thinking’ levels or stages that are made without helping the students to develop the ‘tools’ encourage plagiarism. If students do not have the necessary knowledge and comprehension and are unable to apply these lower level skills, they cannot ‘think’ and evaluate even the simplest problems. Even the brightest and best students find it difficult to make those discoveries or cognitive leaps without some guidance. Most of us have experienced those ‘a-ha!’ or ‘Eureka’ discoveries, and we generally hope to have our students experience the satisfaction of learning by discovery. Perhaps we can help our students more, and along the way, help them avoid plagiarism traps, by guiding their processes of discovery.

Gagne (1970, p. 292) supports the hypothesis that:

Learning is cumulative, then, because particular intellectual skills are likely to be transferable to a number of higher-order skills and to a variety of problems to be solved. As the individual develops, he continually increases his store of intellectual skills. This means that the possibilities of combination of these learned skills, in transferring to the learning of higher-order capabilities,
increases exponentially. These cumulative effects of learning are the basis for observed increases of intellectual “power” in the growing human being.

It may not be easy to ‘guide’ students into discovery, but it is possible. Perhaps if we are to be successful in our teaching or helping students learn how to learn, we have to create what Festinger (1957) termed a ‘cognitive dissonance’. Festinger hypothesises that the individual is constantly bombarded with external and internal conflicts between what the ‘subject’ experiences and what the ‘subject’ knows. Society ‘knew’ that the sun revolved around the earth, yet scientific evidence proved that the earth, in fact, revolved around the sun.

Furth (1969) tells us how Piaget develops a similar theory in his use of ‘assimilation’ and ‘accommodation’ for processing intellectual ‘information’ and stimuli. Either the stimuli are made to fit into the existing cognitive networks, or the networks must change to accept conflicting stimuli.

Most University lecturers and teachers would accept the role of ‘change agent’ as creators of cognitive dissonance. We do so in many ways. We ask students to ‘critique’ and ‘analyse’. In one of our roles as creators of human capital we willingly take the responsibility to challenge existing ‘truth’ and ‘fact’. Although it is sometimes difficult to get students to do the same, it is, in our view, our duty to take this responsibility. In setting writing assessments and essays our primary policy consideration should be to ensure assessment tasks such as essays and other written assignments be formulated and set at the appropriate cognitive level. By so doing we acknowledge the value of earlier research on learning and development and emphasise improved outcomes for our students.

AN ‘ACCOUNTING SUBJECT’ EXAMPLE

ACCY211 - Management Accounting II is a compulsory subject offered by the School of Accounting and Finance for second year students taking an accounting major at the University of Wollongong (UOW). In order to enroll in this subject, students must have completed at least two (2) basic accounting subjects, ACCY100 (which involves financial accounting, basic recording, measurement, bookkeeping, financial statements, and accounting information) and ACCY102 (a subject that continues the themes introduced in the financial accounting but includes further measurement and reporting issues for internal users). In addition these students have usually completed a core of introductory subjects including, Microeconomics, Quantitative Methods (Business Statistics), Management, Marketing and Business Information Systems. Most full time students would also be enrolled in Financial Accounting IIA (introducing corporate accounting issues)\[9\], Business Finance 1, and a Contract Law subject. Students are under pressure in their second year, and it is a difficult time for those who do not engage early in the semester. The subject is a difficult subject with a history of high overall failure rates. Over the last 5 years, the overall failure rate in the subject has hovered between 25% and 35%.

One of the requirements for the subject is to submit, in good form, an essay on an assigned topic. Approximately 210 students were enrolled in the subject during Semester 1, 2002. There were four (4) topics assigned to the class, and each student was assigned a specific essay question using a systematic random sample approach.

The starting topic was drawn at random, and students assigned to topic 1 through 4 in alphabetic order. Students were self-selected into tutorial groups. The subject had no
attendance requirements for either lectures or tutorials. Class attendance was typical for similar subjects offered by the School of Accounting and Finance. Since this study reviews only the ‘amount’ and ‘substance’ of plagiarism, our hypothesis is that there is little if any tutor or instructor affect on the research question. A review of the marks for the subject confirms this hypothesis. There was no significant score differences between tutorials, markers or essay questions. Further analysis of the data may reveal other information, but our analysis to this point does not give any indication of systematic bias in our measures.

The Topic 1 Essay was selected for analysis using the Turnitin plagiarism detection computer program. The question was intended to address questions and issues at analysis and synthesis levels of Bloom’s Taxonomy. Careful consideration was given to the selection of the topics assigned to the students. We tried to make sure that the level of difficulty was appropriate for the subject.

The subject outline (syllabus) contains warnings to students about plagiarism and the possible penalties if a student is found to have committed plagiarism in the assignments. Every UOW subject has a written component. UOW Accounting and Finance students are required to submit an essay in every one of their subjects. Students were told that they must submit their essay assignment in both ‘hard copy’ and on a 3.5” computer disk in Microsoft .doc format.

The University has a written policy regarding Acknowledgement Practice[12]/Plagiarism

“1. Acknowledgement Practice[12]"

In a university, ideas are important, and it is also important to give people appropriate credit for having ideas. There are several reasons why you should give people credit when using their ideas; three of the more important of those reasons are: "fairness to authors and other students, the responsibility of students to do independent work, and respect for ownership rights."

If, in writing an essay or report, you copy a passage from a book word-for-word and don’t give a reference to the book, this is:

- unfair to the author who wrote the passage in the book;
- unfair to other students who do their own work without copying;
- failure to do independent work as expected in a university; and
- breach of copyright.

2. Plagiarism

Giving and gaining credit for ideas is so important that a violation of established procedures has a special name: plagiarism. Plagiarism means using the ideas of someone else without giving them proper credit. That someone else may be an author, critic, journalist, artist, composer, lecturer, tutor or another student. Intentional plagiarism is a serious form of cheating. Unintentional plagiarism can result if you don’t understand and use the acceptable scholarly methods of acknowledgment. In either case, the University may impose penalties which can be very severe.

Over many years, procedures have been developed for acknowledging ideas in all forms of expression. In published writings, for example, authors are
expected to give references to articles and books on which they have relied, and to give written thanks to people who have helped them in preparing their work.

There are several methods for giving credit in written work and the lecturers and tutors in the academic units in which you study should inform you about methods that are acceptable to them. A good way to gain a better understanding of those methods in a particular discipline is to read articles published in academic journals of that discipline.”

Students are reminded of the policy in each subject (course) and are told that instructors view plagiarism as a serious problem and that if detected, plagiarism will be addressed. Students are required to state that they have understood and complied with the rules and policies regarding plagiarism on the cover page of their submission, as the following declaration, which appears on that generic assignment cover sheet, indicates,\textsuperscript{[13]}

\begin{center}
\begin{tabular}{|l|l|}
\hline
DECLARATION: I certify that this is entirely my own work, except where I have given fully-documented references to the work of others, and that the material contained in this essay has not previously been submitted for assessment in any formal course of study. & PLAGIARISM: Plagiarism is CHEATING. The penalty for deliberate plagiarism is FAILURE in the subject. The University of Wollongong also endorses a policy of non-discriminatory language practice and presentation. \\
\hline
Signature: & PLEASE NOTE: STUDENTS MUST RETAIN A COPY OF ANY WORK \\
\hline
\end{tabular}
\end{center}

The minimum penalty for plagiarized work in this subject is a zero mark for the assignment. The essay mark was 20\% of the total mark for the subject.

Every student complied with the requirements of the submission and 52 computer disks were submitted for Topic 1. Of these 52 disks, one was faulty and a second was infected with a non-cleanable computer virus. Both these essays were eliminated from the analysis. Our analysis is based on 50 usable essays.

Turnitin reports ranges of ‘copying’ or ‘similarity’ by comparing the essays with sources on the web, and with other papers in the Turnitin data bank. Turnitin also compares essays submitted in this cohort with other essays in the cohort.

[Insert Table 1 about here]

The two essays in the 24\% to 49\% band of similarity were both acceptable because the quotations and content were correctly cited. One of the essays in this high band had 25\% similarity and the second 47\%. The essay with 47\% similarity did not receive a ‘high’ or distinction mark, but it was acceptable and a passing work.

Nearly all the essays in the 0\% - 24\% band took computational segments from the required textbook and other text-referenced citations. Again, where there was ‘lifting’ and ‘quoting’ students did follow the rules and used proper referencing for their presentations. Because the question was a technical question aimed at analysis and synthesis, this outcome was expected (and desired).
While we do not believe that students should ‘string together’ a series of quotes and present that as their ‘essay’, the general level of ‘originality’ and ‘research’ seems acceptable for this subject. The two essays that had high [yellow band] similarities both used the same citations. Given that the question was quite specific in substance and form, and that the paper cited and quoted gave a reasonable and good answer to the subject, markers did not find fault with the student’s substance or form.

**CONCLUSIONS**

Plagiarism is and will remain an unacceptable act in the contemporary University. Even those at the highest levels of University governance have been caught up in matters of academic integrity arising from a failure to properly attribute research work. They have been forced to resign their positions. It is a crime of sorts, an academic crime at the very least. Universities, elite or otherwise, attempt to draw the attention of students to what constitutes the act and ways of avoiding plagiarism. Guides to essay writing, specifically aimed at university students, give varying degrees of information on plagiarism and advice on how to avoid it but can only be helpful for those students motivated enough to consult them.

Instructors must be aware of the reasons that students may be tempted to plagiarise. Carnegie Mellon’s warnings on plagiarism point to issues that may be endogenous to the individual, such as low self esteem, fear of failure and other negative thoughts about themselves that only seem to reinforce the motives for committing the act.

However, it is also argued here that good policy should aim to ensure assessment tasks such as essays and other written assignments be formulated and set at the appropriate cognitive levels, to avoid instructors being complicit in the commission of this crime, to avoid claims of entrapment. If we accept the value of Bloom’s taxonomy of Educational Objectives and Gagne’s cumulative learning then we understand how tasks need to be appropriate for the students level of cognitive development. Between what students know and what they experience are spaces of cognitive dissonance. If we ask that students undertake tasks that they are not prepared for, and cannot have sufficient background for, then the level of plagiarism on essays and written assignments will increase.

If students know that their work will be subjected to review, there is an added incentive to follow the rules and to be more circumspect in their submission. Giving careful directions about the requirements to the student writers also helps prevent plagiarism. We believe that instructors have the responsibility to tell students why they assign essays and what the requirements for the assignments are. Students have to be able to build a framework on which to hang their thoughts and ideas. In our example, we believe that the assessment task given was appropriate for the level of knowledge and experience that the students possessed. Written assignments and essays that are pitched at the appropriate level can act to reduce or suppress incidents, levels of, or motivation to commit acts of plagiarism. We believe that our example from an accounting subject supports our hypothesis. Levels of similarities with information in the software data bank and other essays submitted from the cohort, was acceptable. The level of ‘originality’ and ‘research’ that students demonstrated after their essays were subjected to checking by plagiarism detection software seems acceptable for this particular subject and task. With task and challenge set at these appropriate levels, we are promoting a policy regarding written assessment that is designed to reduce the student’s motivation to commit the crime of plagiarism.
We did not directly address the difficulties and problems of Non English Speaking Background (NESB) students in this paper. However, we do know that particularly South East Asian\textsuperscript{14} students may face more problems that those for whom English is their first language. Nevertheless, given the results of our preliminary analysis, there is no reason to suspect that NESB students ‘copied’ more than others did.

There is much more to be done. We believe that we need to address issues of cognitive complexity in our subjects and courses. We cannot expect students to have either the breadth or depth of knowledge as the instructors or tutors. We also have to be mindful that the current ‘batch’ of students does not operate at the same level as those who have already completed the subject.

Writing and communication are parts of our processes of education. There is sufficient support in the academy and in the ‘user community’ to show teachers and researchers that gaining writing competency is an essential part of a student’s University education.

\begin{table}[h]
\centering
\begin{tabular}{|c|c|c|}
\hline
% Of Similarity & Number of Essays & % Of Essays \\
\hline
< 20 words  & 7 & 14\% \\
0 – 24\% & 41 & 82\% \\
24 – 49\% & 2 & 4\% \\
Total & 50 & 100\% \\
\hline
\end{tabular}
\end{table}

ENDNOTES

1 \url{http://www.princeton.edu/pr/pub/integrity/pages/plagiarism.html}
2 \url{http://www.princeton.edu/pr/pub/integrity/pages/original.html}
3 \url{http://www.indiana.edu/~scs/unhs/academicpolicies.html}
4 \url{http://www.drexel.edu/cchc/studentlife/Judicial/code/acadintegrity.html}
6 \url{http://www.google.com}
7 \url{http://college.hmco.com/accounting/resources/instructors/air/fall_2002/writing.html}
8 \url{http://www.studentaffairs.cmu.edu/acad_integ/acad_integ_text.html}
9 Financial Accounting is offered over each of the 3 years of the curriculum … one financial accounting subject is offered in the first year, this Financial Accounting IIA and another, Financial Accounting IIB in the second year and a third Financial Accounting III as a ‘capstone’ in the third year.
Most students attend at least 80% of the weekly tutorials that are held once per week. Many students ‘shift’ between tutorials as their schedules allow. Attendance at twice weekly lectures varies between 40% and 75%. Students also self-select into a ‘computer lab’ that guarantees them a place in the University Faculty of Commerce computer facility one hour per week. … Lecture notes are put on the ‘web’ and are available to the students before the lectures. Whether this is effective for learning is open to discussion, as is the whole movement to ‘on line’ dissemination of subject materials. But that is another issue and determination of this issue is not the objective of this paper.

11 http://www.turnitin.com


NESB enrolments in the Faculty of Commerce at UOW vary from about 25% to 30% of the students. We also know from experience that many Japanese and Chinese students, particularly those from the People’s Republic of China come to Australian universities from an educational system that encourages rote learning and memorisation. Students from many South East Asian countries are taught to copy and memorise. In many systems, emphasis is placed on the knowledge, comprehension, and application skills. This is almost antithetic to the philosophy of education in the Western University where instructors try to get students to ‘think’ and develop analysis, synthesis and evaluation skills. Due diligence is necessary in working with NESB students to make sure that the subject requirements include what the student ‘thinks’ as well as what the student can ‘memorise’.
REFERENCES


Perry, W. G. J. (1968), Forms Of Intellectual And Ethical Development In The College Years: A Scheme, Holt, Rinehart and Winston, New York.
