

Plagiarism detection and prevention: Are we putting the cart before the horse?

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Abstract: *The increasing ease of detecting internet plagiarism has intensified debate in Australia, as well as the UK and the USA, on effective deterrents in the face of increasing evidence of plagiarism. Many universities are re-vamping their plagiarism policies and some conferences have themes entirely devoted to the subject of academic integrity. Policies and conference discussions relating to academic values and integrity have focussed on improved information on the rules of citation and attribution, coupled with more systematic vigilance and disciplinary procedures. The literature has also become increasingly insistent that information on rules of citation and attribution needs to be coupled with an appropriate apprenticeship into the conventions and language of academic writing. Yet there is a first step that is still being overlooked, the initial induction of students into the research-led, evidence-based culture of academic endeavour. By focussing on rules and strategies for avoiding plagiarism, but ignoring the basic reasons for these requirements, we have put the cart before the horse. This paper suggests that tertiary induction of new students needs to focus firstly on developing an appreciation of the culture of enquiry that characterises learning at the tertiary level and that success is more likely if the students' goal is something positive: to achieve a new approach to learning, than if it is something negative: to avoid 'committing' plagiarism.*

Keywords: *plagiarism, genre analysis, culture of enquiry*

Introduction

In the age of the internet, the ease of cut and paste plagiarism is being countered by a parallel ease in detecting plagiarism by electronic means such as Google or Turnitin.com and has fuelled the debate on finding solutions to the problem, particularly in the tertiary sector. The debate is captured in the literature, a flurry of updated plagiarism policies on university web pages, and in the publication of a wide variety of books and websites offering information and guidance to staff and students for minimising and avoiding plagiarism (see for example, in the US, a 'Plagiarism Quiz' on the University of Indiana website, or in the UK, Plagiarism. A good practice guide at Oxford Brookes, or the Australian Universities Teaching Committee sponsored publication by the Centre for the Study of Higher Education of the University of Melbourne, *Assessing Learning in Australian Universities* (AUTC, 2002), to name just a few of the samples accessed). In February 2005 the Joint Information Systems Committee's Plagiarism Advisory Service made its most recent publication *Deterring, Detecting and Dealing with Plagiarism* available on the web and sent it to all UK Colleges and Universities (JISC, 2005).

These publications reveal a growing recognition of the intrinsic complexity of the concept of plagiarism and the difficulties it presents for both students and staff. Calls for systems that provide for tough but fair decisions on penalties as deterrents tend to be qualified by calls for improved provision of information to students, coupled with educative strategies for teachers and learning support for students.

Dealing with plagiarism

Defining plagiarism in a way that is meaningful for dealing with its occurrence is not an easy matter. Simple definitions, e.g. 'using another person's ideas, designs, words or works without appropriate acknowledgement' (The University of Adelaide, 2004) are usually qualified by reference to lists of 'exceptions' and the exercise of 'leniency'. This is because the term 'plagiarism' encompasses a broad band of meanings, stretching along a cline from outright cheating to inadvertently omitting attributions for innocent reasons, such as a student's lack of understanding that tertiary study is a 'new game' with 'new rules' (Leask, 2004), or simply their unfamiliarity with the accepted academic language for paraphrasing and introducing quotes. The following excerpt from an introduction to a university plagiarism statement makes that point.

The University regards all plagiarism as unacceptable. At the very least, unintentional plagiarism is a lowering of the standards of academic integrity and an impediment to student learning. Where plagiarism is intentional and/or systematic, it is cheating. In order to maintain high standards of academic integrity it is the obligation of every member of the University to know and respect the rules concerning plagiarism, and to seek and foster a learning environment that encourages the development of academic skills that are appropriate for each discipline. Plagiarism is always unacceptable but can occur as a result of inadequate understanding of the procedures of appropriate referencing or because of a lack of skills in academic writing (The University of Adelaide, 2004).

Recent publications on the topic (Carroll, 2002; Leask, 2004) and conferences entirely devoted to the topic (e.g. Academic Integrity, Plagiarism and Other Complexities, held at the University of South Australia, November 2003, and a Symposium on Promoting Academic Integrity at the University of Newcastle, NSW, November 2004) reveal a growing concern that the complexity of plagiarism must be recognised and met in a variety of ways. They indicate that reliance on a traditional, single strategy approach of providing students with information about the rules and sanctions relating to plagiarism has not been a successful deterrent.

Even the more educative strategies of providing academic induction and workshops on academic writing, and plagiarism avoidance, appear to have been largely ineffective in the light of the evidence that is emerging from the application of text-matching services such as Turnitin.com. A 2002 trial of Turnitin.com by six Australian universities revealed that in almost 14% of the 1925 papers scrutinised in that study 'close on 14% of student essays contained an unacceptable level of unattributed material' (O'Connor, 2003). Results such as these do not, of course, distinguish cheats from the 'inadvertent' plagiarists. However, they do suggest a potential blowout in numbers detected as the use of electronic detection services becomes widespread. This paper proposes that a new look at current practice – the 'what' and the 'how' of minimising or avoiding plagiarism – should be taken one step further by investigating how academics might integrate into the mainstream of their teaching the 'why' – the basic reasons why the conventions of citation are regarded as a matter of academic integrity.

Clarifying the rules: the 'what'

The emphasis in the literature and in plagiarism policies has long been on the clarification and dissemination of the rules of citation and referencing conventions, on requirements such as originality

statements and signatures, and on warnings of penalties if plagiarism is detected. However, this strategy addresses only the cheating end of the plagiarism cline. The threat of serious penalties may be effective in deterring some students from deliberate cheating, but they are of little help to those students who are new to the academic culture and who inadvertently fall into the 'trap' of plagiarism (Stevenson, 1995, McGowan, 2003).

Through the emergence of internet detection systems, faculties are provided with a tool for dealing with plagiarism more appropriately than was possible when lecturers had to rely on their own knowledge and intuition. The high speed of identifying obscure sources as well as the more obvious ones has improved the ability of staff to detect unattributed quotes and to be firm and fair in their response, even while conceding that non-internet based sources may continue to escape detection. University policies generally have systems in place for dealing with offenders, but the inevitable repercussions from reported cases of plagiarism, and the absence of consistent criteria for judging the severity of cases, are also deterrents for staff to engage enthusiastically in plagiarism detection. On the other hand, failure to detect cheating that is obvious to fellow students is likely to be both demoralising to students who abide by the rules, and an incentive to follow the lead of those who cheat.

In an effort to improve consistency in the type and severity of penalties applied to deliberate or systematic plagiarism, and to function as an effective deterrent to cheating, Oxford Brookes University has provided a model (Carroll, 2002) which forms the basis of the JISC (2005) publication *Deterring, Detecting and Dealing with Plagiarism*. At Oxford Brookes, electronic detection is supported by a systematic follow-up procedure. A set of criteria and associated penalties was developed for use by a network of staff identified within the faculties as 'academic conduct officers'. These staff deal with identified cases and apply the agreed criteria in their decisions on whether sanctions are required, and if so, the type of penalty to be imposed. The academic conduct officers comply with an institution-wide networking and reporting regime in an effort to provide a fair and effective system of sanctions (Carroll, 2004). The maintenance of this system clearly requires energetic coordination. While all tertiary institutions may not be prepared to devote resources of this level, many university plagiarism policies refer to the existence of a central register to record cases of academic misconduct in order to deal with repeat offenders.

Inadvertent plagiarism appears to be more difficult to address than deliberate cheating. In the first instance it is no easy task to determine a clear line that separates the two. Along the plagiarism cline there are reasons such as work overload and poor time management that cause students to take short cut routes to completing assignments. Then there is the fact that it is too hard to establish exactly what the student intended. For this reason a solution to minimising unintentional plagiarism is more likely to be found in strategies applied globally at whole class level and as an integral part of the curriculum. The increased numbers already detected electronically certainly suggests an urgent need for more radical pre-emptive action at the level of course design and delivery, and the apprenticeship of students into the academic culture and its conventions of engagement with the literature.

The apprenticeship approaches outlined in the following draw eclectically on scholarly studies in the disciplines of education and linguistics that inform the practice of academic staff development and student support, and are reinforced by the author's personal experience of many years of tertiary teaching in both of these areas.

Plagiarism minimisation and avoidance: the 'how'

Many useful strategies for lecturers to minimise the incidence of plagiarism have been suggested in the literature. They include appropriate curriculum design and the alignment of learning objectives with assessment tasks and the design of explicit criteria for assessment (AUTC, 2002). They also include

strategies such as ensuring that such tasks are designed to require and reward students' application of information to personal or local situations, and refraining from setting tasks that can be satisfied by simple regurgitating of information (Carroll, 2002).

Electronic detection services as analysis tools for staff

Electronic detection is a potentially useful basis for devising methods for addressing the bulk of unintentional plagiarism in mainstream teaching. Understandably, staff responses to the availability of text-matching services such as Turnitin.com have reflected a reluctance to engage in negative procedures of catching 'offenders'. However, their response fails to recognise the potential use of electronic detection as a learning and teaching tool, and the fact that it can be used to promote good practice. One of the advantages of obtaining 'originality reports' is that the results force reflection on the possible causes behind the incidence of widespread copying. Russell Hunt (2002) poses this in the provocative title of his article *Four Reasons to be Happy about Internet Plagiarism*. Instead of indulging in the simplistic response of lamenting a 'moral decline', staff can, from an analysis of the Turnitin 'originality reports' gain an insight into the size of the problem, much of which may be at the 'inadvertent' end of the plagiarism cline.

Electronic detection is well placed to help staff gain a true appreciation of the gaps in their students' understanding of the citing and referencing conventions required in the process of academic writing. At a time when the numbers of international students entering our universities is continuing to increase, the analysis of results from Turnitin originality reports can also become an invaluable tool for lecturers to gauge their students' difficulties in choosing the appropriate language to indicate effectively when they are drawing on sources from the literature to support their own arguments.

A period of academic apprenticeship for students

To deal with student inability in managing citation and referencing conventions, lists of rules, examples and exercises are generally provided. In many institutions students are encouraged to seek out learning centres to practise these conventions or to undertake workshops on academic writing or avoiding plagiarism. In fact, a standard response by subject lecturers continues to be to rely on remediation of individual students by referring them to a language or study skills centre for 'support'. However, if the bulk of plagiarism detected by the electronic services should turn out to be an indicator, not of cheating, but of a lack of control of discipline-specific language, then a more effective solution would be to provide a period of apprenticeship (Lemke, 1985) as a mainstream strategy.

Such a period of apprenticeship would be designed to allow sufficient time during which carefully staged assessment tasks and adequate feedback provide a 'safe' environment for students to develop the necessary skills and academic language conventions. During this time, appropriate language for specific assignments would be modelled within mainstream lectures or tutorials. Teaching students to identify the generic structures of the texts of their discipline is not a new approach to academic language development (Cope & Kalantzis, 1993; Halliday & Martin, 1993; Swales, 1990; Weissberg & Buker, 1990). The innovation proposed here is that the task should become part of the mainstream activities for all students in transition to tertiary study, whether they are school leavers or mature students or international and other students for whom English is a second or later language.

Genre analysis as a tool for students

Genre analysis is a means for empowering students to acquire the structure and language of the academic genres they need to master. Genre analysis involves the students in actively developing an awareness of the typical structures and language patterns required in a particular discipline and for specific assignments.

Students are encouraged to examine a variety of examples of the written genres they need to produce, and to identify mandatory and optional elements in both the overall structure and the language features that are typical for specific genres. In particular, they are encouraged to build up a stock of commonly used phrases that may be re-used to good effect in their own writing (Cope & Kalantzis, 1993; Pennycook, 1996).

The accumulation of language items that are appropriate for writing in different disciplines is one of the processes that, given the right conditions, may occur subconsciously for learners over a life time. But international students on short visas do not have much time. Nor for that matter do many local students, whether they enter university from school, or in later years. By gaining access to the tool of genre analysis they can accelerate the process of acquiring the specific academic language they need, through learning how to make their own analyses of the generic structures and typical vocabulary choices of their reading, and using these to inform their writing.

Staff teaching in the faculties have, in my experience, rightly protested that they are not language teachers, and in the light of the heavy workloads many academics have to bear, they have a good case to justify avoiding the additional work entailed in providing a language focus in the mainstream. However, the content of their disciplines is inextricably bound up with the language in which it is communicated. No one is better placed than subject teachers to identify the structural features and word choices that characterise writing that is acceptable within their discipline. The two ingredients to mainstreaming discipline-specific genre analysis are (1) dedicating some activity time within the lectures and other classes to this purpose and (2) using this time to model the writing of their ideas in discipline-specific language and encouraging students to continue this process for themselves. In many Australian universities Academic Learning Centre staff would wish to assist in the analysis of texts to use as models in this way. Their time, in fact, would be more profitably spent in collaborating with discipline-based staff to devise analysed models for mainstream use, than in dealing with the issue in a remedial mode that is implicit in the referral of students to those centres.

Providing time during formal classes is seen by many lecturers as stumbling block. But on the principle that prevention is better than cure, and time-saving in the long run, some innovative 'active learning' approaches (Cannon & Newble, 2000) may be found, through targeted action research projects perhaps, to making use of mainstream teaching time to focus not only on content but also the means of communicating it.

However, even the potentially effective strategy of introducing students to the tool of genre analysis during a period of apprenticeship may fail to substantially reduce the incidence of plagiarism while the underlying reasons for the use of academic conventions are not made explicit. A focus on rules and strategies (the what and the how) in order to avoid penalties seems to be an inefficient motivator. A more successful outcome might be achieved through a focus on the 'why'.

The culture of enquiry: the 'why'

In the plagiarism debate a fundamental first step has been overlooked. This paper suggests that an initial focus on the rules and strategies on their own may be no more than mechanical training for repetitive behaviour and encourage a surface approach to learning. New students may not be receptive to this training, especially when the concept goes counter to the culture they have come from (Cadman, 1997). What has been neglected in this debate so far is a focus on the ultimate reasons for the rules of citation in the context of academic study (the why).

In assisting students' transition to our academic environment there is a first step that would help them to recognise that the essential characteristic that distinguishes academic study and writing from that

developed in the school system is the focus on research and evidence in developing arguments and stating a point of view. Indeed, the very concepts of ‘argument’ and ‘opinion’ are given a different meaning from their ‘common sense’ use in everyday application. Chanock (2004) summarises the confusion this causes for new students:

Students are criticised for failing to construct an argument when the question did not seem controversial in any way. If they were asked to comment on the theme and character of the first chapter of a novel, for example...they wonder “what there was to argue about?” If they were asked for their opinion on whether it is rational to believe in God...and they get a poor result, they wonder how an opinion can be wrong, or even “if they didn’t want my opinion, why did they ask for it?” (p3).

What students need to become aware of is that in undertaking tertiary study they place themselves into a research tradition. This means that they need to learn to acknowledge that at least some aspects of what they are writing about have been dealt with before, and that the opinions they express need to be backed up by evidence. They must become familiar with a new culture: the ‘culture of enquiry’.

The Boyer Commission report *Reinventing undergraduate education* (Boyer Commission, 1998) proposes that students be introduced into the culture of enquiry in their ‘freshman’ year and that they be provided with ‘opportunities to learn through inquiry rather than simple transmission of knowledge’ (p20) from the start of their studies. Russell Hunt (2002) gives as the fourth, and ‘most important’ reason for being ‘happy’ about internet plagiarism, that it will force us ‘to help our students learn [...] the most important thing they can learn at university: just how the intellectual enterprise of scholarship and research really works’. The discussion on avoiding or minimising plagiarism should therefore be preceded by this other, emerging, discussion in higher education: that of research-led teaching in a culture of enquiry as the basis of tertiary learning and teaching (Brew, 2003).

Conclusion

The growth in recent years of an understanding of the complexity of plagiarism and the need for providing new students with a period of apprenticeship into the academic conventions and language in which to realise these are to be welcomed, even though much work still needs to be done to translate this understanding into mainstream teaching. However, in the first instance the aim in relation to plagiarism needs to be turned from a negative into a positive one, from the avoidance of plagiarism to the achievement of entry into the culture of enquiry.

To quote Hunt once more:

...offering lessons and courses and workshops on “avoiding plagiarism” - indeed, posing plagiarism as a problem at all - begins at the wrong end of the stick. It might usefully be analogized to looking for a good way to teach the infield fly rule to people who have no clear idea what baseball is (Hunt, 2002).

Putting it another way, by ensuring that the starting point for academic apprenticeship is a guided entry into a culture of enquiry, highlighted as the essential characteristic of tertiary education, we would, to re-visit the metaphor of our title, return the horse to its sensible position before the cart. If our students know that the reasons for the rules of citation are not arbitrary, but fundamental to the culture of enquiry, they may see the concept of academic integrity in a less threatening, more appealing light. They are bound to find more motivation in the achievement of something positive – their personal control of a new learning process – than in the threat of a negative – the requirement to avoid the ‘offence’ of plagiarism.

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