

Minimising Plagiarism

Universities throughout the world have become concerned with the question of how to minimise and respond appropriately to student plagiarism and other forms of cheating. Australian universities are highly active in educating students about plagiarism and in detecting breaches of their academic expectations. The advice and resources provided here are designed to assist these efforts.

Universities and academic staff are advised to focus around four main strategies, all underpinned by the central principle of ensuring fairness:

- 1) A collaborative effort to recognise and counter plagiarism at every level from policy, through faculty/division and school/department procedures, to individual staff practices;
- 2) Thoroughly educating students about the expected conventions for authorship and the appropriate use and acknowledgment of all forms of intellectual material;
- 3) Designing approaches to assessment that minimise the possibility for students to submit plagiarised material, while not reducing the quality and rigour of assessment requirements;
- 4) Installing highly visible procedures for monitoring and detecting cheating, including appropriate punishment and re-education measures.

The first three strategies are proactive and intended to help reduce the incidence of plagiarism. The fourth strategy is reactive and while it might include efforts to reduce the incidence in the longer term, it also includes immediate responses when plagiarism does occur.

How widespread is plagiarism in Australia?

It is clear that plagiarism occurs in Australian higher education. However, in the absence of trustworthy quantitative data, it is impossible to determine whether it has risen or is rising. Plagiarism does seem to be widespread, and there is evidence of it occurring across the range of disciplines. There is a perception among some academic staff that increasing student disengagement from university life has led to an increase in plagiarism. Further, there is a perception among some staff and students that there is more plagiarism in some disciplines and/or subject areas than in others.

There is also evidence that the modes of plagiarism have changed in recent years. Specifically, the advent of the Internet has made plagiarism in written assignments easier for students. Full papers can be downloaded for free or at a relatively small cost and students can cut and paste from a range of sources, without acknowledgment. In addition, the current emphasis in higher education on group work may have inadvertently led to an increase in students plagiarising each other's work. Finally, the increase in class sizes means that at times students may not have ready access to their teachers and sometimes rely on a network of past students who provide "form guides" for full assignments for loan or purchase.

What is plagiarism?

Plagiarism in higher education can take many forms. Some of the more common forms are listed below, however it should be noted that definitions of plagiarism vary somewhat across the disciplines in accordance with differences in knowledge authorship conventions and traditions.

- Cheating in an exam either by copying from other students or using unauthorised notes or other aids.
- Submitting, as one's own, an assignment that another person has completed.
- Downloading information, text, computer code, artwork, graphics or other material from the internet and presenting it as one's own without acknowledgment.
- Quoting or paraphrasing material from a source without acknowledgment.
- Preparing a correctly cited and referenced assignment from individual research and then handing part or all of that work in twice for separate subjects/marks.

There are also forms of plagiarism that relate directly to student participation in group work.

- Copying from other members while working in a group.
- Contributing less, little or nothing to a group assignment and then claiming an equal share of the marks.

All plagiarism is not equal

There is much that universities can do and are doing to reduce plagiarism. In order to evaluate the different approaches and strategies being used, a consideration of three dimensions of plagiarism is useful. These dimensions are,

- 1) the student's *intent* to cheat,
- 2) the *extent* of the plagiarism an individual student has committed and
- 3) the response that might be made by the university to deal with each case of plagiarism that occurs.

Each of these dimensions is discussed below.

Why do students plagiarise?: Understanding student intentions and motives

There are many reasons why students plagiarise but one central question is, 'Did they intend to do so?' They may have. Table 1 outlines some of the possible reasons for intentional plagiarism in higher education.

Table 1: The context of plagiarism in higher education

Noah and Eckstein (2001) identified five factors that influence dishonesty among academic staff :	Are these pertinent to students ? (Y/N)
1. pressures on the individual to succeed and the penalties for failure	
2. the expected reward to be gained	
3. the opportunities to be dishonest	
4. the probability of getting away with it	
5. the social norms governing such behaviour	

In addition, or conversely, there may be other *unintentional* reasons that students plagiarise including:

- Their limited or incorrect understanding of what, exactly, plagiarism encompasses
- Their incorrect understanding of citation and referencing conventions
- Their limited skill base in:
 - summarising
 - paraphrasing
 - critical analysis
 - argumentation
 - managing contributions to group work
 - time management
 - workload and stress management.

There is a potentially complex combination of factors that might contribute to plagiarism by a student.

It might be safely assumed that some students 'copy and paste' and participate in other forms of plagiarism deliberately because they are lazy, sneaky and/or competitive. It might also be assumed that some students plagiarise deliberately in desperation because they are under pressure from their academic workload requirements, or simply run out of time. However, a proportion of the incidence of plagiarism in higher education is also attributable to misunderstanding and ignorance among students about why they should avoid plagiarism and how they can do so.

Consider the following continuum:

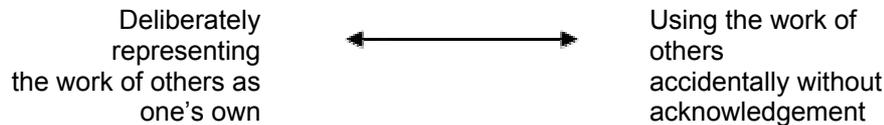


Figure 1. Intent to cheat continuum

One useful reminder, should detection of plagiarism occur, is:

Don't assume plagiarism is *necessarily* intentional.

"If you read something and put it in your own words, is that plagiarism?"

The special case of group work

In group work, students seem to be at particular risk of unintentional plagiarism. Australian students are confused about what constitutes plagiarism in a group setting. There are many cases cited in the popular media where students' confusion about what was acceptable behaviour in group assessment tasks is evident. Students are often uncertain about where cooperation and collaboration stops, or should stop, and where copying begins.

Culwin and Naylor (1995) have developed a continuum that illustrates the issue well:

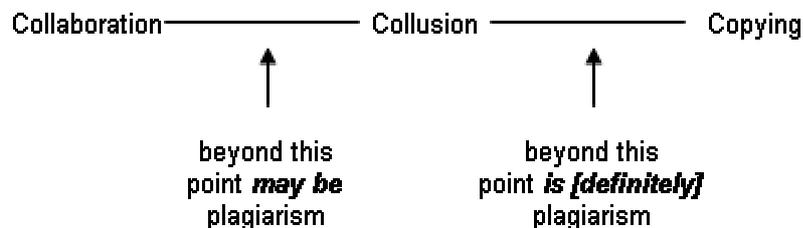


Figure 2: Co-operation/Collaboration/Copying Continuum
(Culwin and Naylor, 1995)

It is an enlightening experience for individuals to determine where, exactly, they understand that plagiarism begins and to consider how this information could be clearly communicated to students working in groups. Walker (1998) suggests that it should be made clear to students when collaboration is allowed and when it is not. It should also be made explicit how, exactly, the commonly requested individual reports from group work should differ.

Determining intent

Having taken all of this into account, the question then arises: if a student plagiarises during individual efforts or group activities, how does a staff member know whether it was done with or without intent?

One method of determining intention is to simply ask a student whether he or she understood their use of the work of others without acknowledgment was inappropriate.

Of course, some academics believe that a student who deliberately cheats is perhaps more likely to be a liar as well and asking such a question may not always result in a truthful response. However, it is equally possible that a student did not deliberately cheat and being unfamiliar with the conventions of academic work, might simply not have understood the requirements of referencing and citation, or appreciated their centrality to presenting an argument.

First year students and international students, in particular, come to mind. Rather than focusing on catching and punishing, it might be more appropriate to provide genuine opportunities for these students to learn the appropriate academic conventions, and the rationale behind them. One way to provide such opportunities is to refer students to the learning support services of the university or to liaise with these services to develop instructional materials and workshops tailored to the discipline and other requirements particular to students' work.

When have students crossed the line?: The seriousness of the breach

The second dimension of plagiarism that it is useful to consider is the extent or degree of individual acts of plagiarism. What can be considered to be 'serious' plagiarism? Definitions of plagiarism and views on what constitutes minor and extreme examples vary widely so it is not surprising that there is enormous confusion among students on this issue. And if they don't know what it is, how do they avoid it?

Consider the extent of plagiarism continuum:

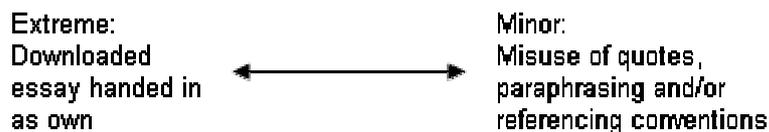


Figure 3. Extent of plagiarism continuum

Carroll (2000) suggests that students need to work with and closely consider definitions of plagiarism to understand them and evidence gathered from Australian students tends to support such a suggestion. Try this exercise (and ask colleagues and students to try it as well):

MAPPING THE EXTENT OF PLAGIARISM

Here are six ways to use sources. Number one is plagiarism; Number six is not. Where do you cross the line?

- 1) Copying a paragraph verbatim from a source without any acknowledgment.
- 2) Copying a paragraph and making small changes - e.g. replacing a few verbs, replacing an adjective with a synonym; acknowledgment in the bibliography.
- 3) Cutting and pasting a paragraph by using sentences of the original but omitting one or two and putting one or two in a different order, no quotation marks; with an in-text acknowledgment and a bibliographical acknowledgment.
- 4) Composing a paragraph by taking short phrases from a number of sources and putting them together using words of your own to make a coherent whole with in-text acknowledgments and a bibliographical acknowledgment.
- 5) Paraphrasing a paragraph by rewriting with substantial changes in language and organisation; the new version will also have changes in the amount of detail used and the examples cited; citing source in bibliography.
- 6) Quoting a paragraph by placing it in block format with the source cited in text and in bibliography.

(Carroll, 2000, based on an exercise in Swales and Feak, 1994).

It is likely that academic staff 'cross the line' at different points, even within the same discipline or department. The point is, if the definition of plagiarism is difficult for academic staff to agree on and articulate in detail, it is little wonder that some students accidentally participate in what appear to be extreme cases of plagiarism.

Carroll (2000) also suggests teaching students the skills of paraphrasing and summarising, giving students opportunities for practice, to get feedback, to see others' efforts and to refine their own. Kalusman (1999) agrees, claiming it is necessary to teach students about the different types of plagiarism, including what he calls 'paraphrase plagiarism' and 'patchwork plagiarism' and how to avoid them by working through examples. Once again, university learning services may be employed to assist in these endeavours.

Planning a considered response to plagiarism: A comprehensive framework

As with determining the intent to plagiarise, deciding on the response to make once plagiarism has been suspected or detected may be difficult and may have to be carried out on an individual case basis, as often happens in Australian universities.

The possible responses to plagiarism can be divided into two broad categories:

- 1) Renewing educative strategies – for example, teach (or re-teach) students the rationale for supporting arguments with evidence and referencing and other necessary, related skills. This approach can also be used pro-actively to deter students from plagiarism.

and

- 2) Penalising offenders – detect and punish students caught breaching expectations.

So-called ‘serious’ incidences of plagiarism are dealt with in a range of ways by Australian universities. Often, when serious plagiarism is suspected, the student and their case are referred to a senior level within the academic structure and dealt with on a case-by-case basis. The issue of intent is central and extenuating circumstances, extent and other factors are also often considered before a response is decided upon.

In the graph below, the primary focus of the approach to take to deal with committed plagiarism is suggested, but punitive and educative responses should not be seen as mutually exclusive. It is possible, for example, to penalise a student for extensive plagiarism whilst concurrently offering education in the conventions of citation and referencing. Depending on student intent to cheat, and perhaps to a lesser degree, on the extent of the plagiarism, individual academics, departments/schools, faculties/divisions or universities will need to make choices, in terms of response, that adequately deal with each situation. The graph below depicts the three dimensions described above in relation to each other.

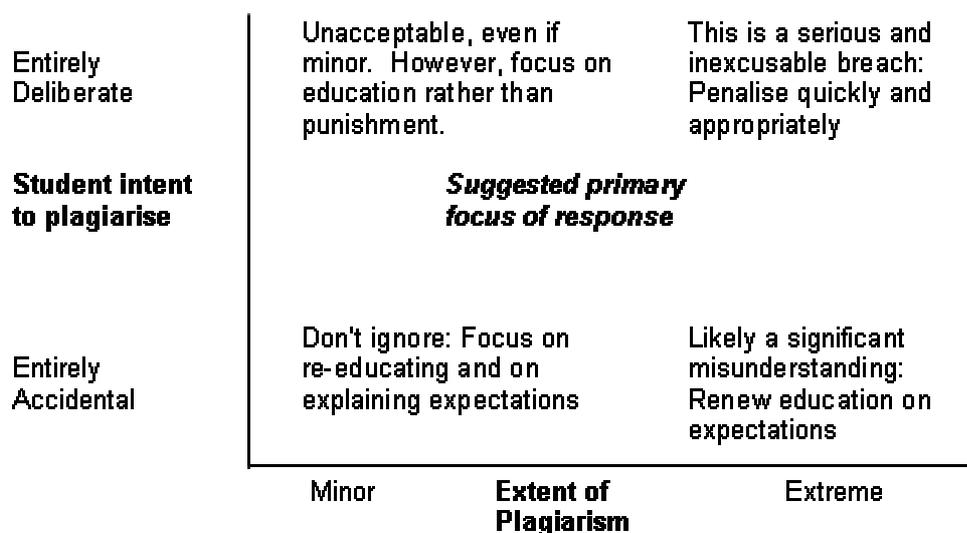


Figure 4: Plagiarism Intent-Extent-Response Graph © Devlin, 2002

The assumptions underpinning these suggested responses are that:

- A student who deliberately commits 'minor' plagiarism has done so because of time and workload pressures and therefore should initially be offered support to manage these.
- A student who deliberately commits 'major' plagiarism may well have the same time/workload pressures but their work constitutes a more serious breach of accepted academic practice and the appropriate first response would need to acknowledge this. Direction to support and advice can be offered concurrently.
- A student who accidentally commits any form of plagiarism needs first and foremost to be educated about why and how to avoid doing so again.

In terms of what response an individual staff member might choose, some questions worth asking are:

- **What is serious?**
- **How will I know?**
- **What will I do once I know?**

Where to start?

Dealing with plagiarism can seem overwhelming, particularly for a new academic. Some simple, yet effective, suggestions:

- Start somewhere
- Start small
- Start where success is most likely.

36 strategies to minimise plagiarism

The strategies below have been gathered from a range of sources, including suggestions and advice from the Australian academic community. It is recognised that some of the strategies are likely to add significantly to academic workload and that the adoption of suggested strategies will depend on local context.

Together these thirty-six strategies can be summarised into a three-point plan:

- Make expectations clear to students.
- Design assessment to minimise opportunities for plagiarism.
- Visibly monitor, detect and respond to incidences of plagiarism.

**Teach students about authorship conventions
and about how to avoid plagiarism**

- 1) Create a climate of involvement and interest rather than of detection and punishment (Carroll, 2000).
- 2) Warn students of the possibility of their work/programs/files being stolen/copied if left on the hard disks of university computers and teach them how to delete this work when they have finished.
- 3) Teach the skills of summarising and paraphrasing (Carroll, 2000).
- 4) Teach the skills of critical analysis and building an argument.
- 5) Teach the skills of referencing and citation.
- 6) Include in assessment regimes mini-assignments that require students to demonstrate skills in summarising, paraphrasing, critical analysis, building an argument, referencing and/or citation.

Counter plagiarism through the design of assessment tasks

“I think that some of the assignments are just asking for students to plagiarise”

- 7) ‘Design out’ the easy cheating options, for example, using the same essay/prac questions year after year (Carroll, 2000).
- 8) Avoid assignments that ask students to collect, describe and present information as these are more prone to plagiarism than those that ask for analysis or evaluation (Carroll, 2000).
- 9) Randomise questions and answers for electronic quizzes/assignments.
- 10) Ensure assessment tasks relate to the specific content and focus of the subject (and therefore the students) so students are less tempted to simply copy something from the web.
- 11) Set the assignment specification on a unique or recent event on which there is unlikely to be much material available (Culwin & Lancaster, 2001).
- 12) Use essay/assignment topics that integrate theory and examples or use personal experience (Carroll, 2000). For example, a field trip report, a task with no right answers or a personal reflection on a task.
- 13) Use assignments that integrate classroom dynamics, field learning, assigned reading and classroom learning (Gibelman, Gelman and Fast, 1999).
- 14) Use alternatives to the standard essay, such as case studies, which present more difficulties in locating suitable material to plagiarise (Culwin & Lancaster, 2001).
- 15) Assess work produced in class, possibly with preparation allowed beforehand, to reduce the opportunities to plagiarise (Culwin & Lancaster, 2001).
- 16) A timed open book essay in class is a variation on the above theme (Carroll, 2000). This is possible with large classes as long as the class is in one room at one time or parallel groups have different questions to answer. Administration and marking are considerations.
- 17) Where feasible and manageable, viva (i.e. orally examine) a random selection of the students briefly in order to check what they have learned and that they are familiar with the ideas in the submission (Culwin & Lancaster, 2001).

- 18) Ask students to make brief presentations to the class based on their written assignments (Gibelman, Gelman and Fast, 1999).
- 19) Require all students or a random sample of students to submit essay outlines and/or non-final versions of assignments. Ensure that all students are informed that they may be called on to submit such drafts.
- 20) Minimise the number of assessment tasks – continuous assessment and overassessment contribute to plagiarism. While three pieces of assessment per subject might ease the emphasis on the exam, this number multiplied by four subjects means a student faces the equivalent task of completing a serious piece of work each week of each semester (Langsam, 2001).

Ask students for evidence that they have not plagiarised

- 21) Ask students to include the library site and call number of each paper source they use and to include the date they accessed each website.
- 22) Ask students to supply photocopies of any references used as part of an appendix (or to have such an appendix available). This helps to ensure all their references are genuine (Culwin & Lancaster, 2001).
- 23) Collect an annotated bibliography before the submission is due. This can be hard to construct from a supplied paper and ensures that the students have done some work before the submission date (Culwin & Lancaster, 2001).
- 24) Insist on evidence for significant claims and let students know that the assignment will not be marked if this evidence is missing.
- 25) Return assignments to students to redo if requirements for providing evidence of sources are not met. If they are never met, disallow students from using the assignment as part of their assessment for the subject.
- 26) Evans (2000) suggests using a meta-essay or meta-assignment where students are asked to answer the question "What did you learn from your assignment?" or "What problems did you encounter while undertaking this assignment and how did you overcome them?"

Make positive use of collaborative work

- 27) Make a virtue of collaborative work in subjects with large student numbers and common assignments. Use group work or syndicates. Ensure that both the criteria for assessing group work and the difference between collaboration and copying are transparent and clearly understood.
- 28) Ask students to work on a task in groups but to submit individual assignments. Ensure the division between collaboration and collusion is clear – give examples of each. Have a mechanism in place to account for 'shirkers'.

Become familiar with resources that may be used for plagiarism

- 29) Educate yourself about electronic options available and attractive to students in your discipline. Culwin & Lancaster (2001) suggest checking that you are familiar with available resources related to the assignments you set.
- 30) Use a search engine to help find the sites students are likely to find. Simply choose a phrase that students are likely to use – a history example is “Thomas Samuel Kuhn was born”.
- 31) Demonstrate to your students your awareness of electronic resources available to them. Evans (2000) suggests downloading examples of the sorts of information students are likely to find in relation to the assignment and distributing it to them - to show that you are aware of their existence. You might even consider discussing the quality of the prepared work with students. As Evans (2000) says, the 'meat and potatoes' of most [undergraduate] research papers can be found on the sites below.

<http://www.dogpile.com>
<http://www.netacrawler.com>
<http://www.askjeeves.com>

Make use of detection software and other deterrents

- 32) Require all students to submit essays and assignments electronically, while making students aware of the plagiarism checking software that exists. Limits on document size may be an issue. The threat of using such software, even on a random sample of essays, may be sufficient deterrent.
- 33) Archive electronic student essays and assignments to enable later crosschecking across students or between pieces of work submitted by an individual student (to establish an authorship index). Issues of expense and IT skills may arise. However, the threat of checking may be sufficient deterrent.
- 34) Use deterrence penalties. For example, a first offence results in failing the assignment, a second means failing the subject (Langsam, 2001).
- 35) Request that all work outside of examinations be submitted with a cover sheet defining plagiarism and requiring the student's signature.

Respond quickly to incidents of plagiarism

- 36) Do something about blatant examples of plagiarism *immediately* (Carroll, 2000).

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