

Assessing students: cheating and plagiarism

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Summary

There has been a recent upsurge of concern about cheating and plagiarism in students' academic work. In a questionnaire survey, Newstead and colleagues (1996) found that substantial numbers of students admitted to some forms of plagiarism, such as paraphrasing or copying without acknowledgement of sources. Somewhat fewer admitted to other forms of cheating. The study was undertaken within one university, but there seems to be a widespread belief that cheating and plagiarism are more of a problem than they ever used to be in Higher Education. This may or may not be true. Cheating has never been a well-documented phenomenon, so perhaps we are simply more aware of the problem or the possibility of the problem, than previous generations of university lecturers. Why have fears about cheating and plagiarism increased?

- **Mass access to higher education:** Most lecturers are now responsible for much larger classes and often feel that they no longer know individual students and their capabilities. This makes any unexpected assessment performance less easy to spot. Where large groups of students undertake course assignments, different markers, or even the same marker, may fail to identify instances of copying and collusion. Some people seem to assume that new constituencies of students may be less academically-able and more likely to cheat, although this is an unproven assumption. Increasing numbers of part-time and distance learning students in conventional universities also present further issues.
- **Changes in assessment practices:** Assessment in Higher Education now includes much more assessed course work of many kinds. Some assessed work may be undertaken outside the university, for examples, on work placements. Traditional closed-book unseen exams, whatever their other merits or demerits, are clearly much easier to police strictly than are course work assignments and projects. Nowadays students are frequently required to engage in collaboration and teamwork as part of their courses. Where individual marks are then awarded, this raises the problem of whether individuals' contributions are being justly attributed. The requirement to work in teams may also lead to confusion amongst students about when they should and when they should not work together.
- **Communication and information technologies:** There is now a huge amount and variety of information available in any given subject, published in a variety of different kinds of texts. Even if we only consider conventionally published texts such as books and journals, the growth is such that a lecturer may well not recognise sources which students may have copied verbatim. The problem is compounded when the additional sources of such information opened up by electronic communication are considered. A student may be able to download most of the text for an assignment from the Internet, perhaps from the web pages of a student in another university. Many students now word process their assignments and are encouraged to do so. Word processing makes it very easy to cut-and-paste downloaded texts or other students' assignments to produce an assignment which appears to be individual but has in fact involved very little effort or independent thought from the student submitting it.
- **The importance of grades:** At one time, getting a top grade was not of compelling importance to many undergraduate students. The employment market and graduate careers were such that most students with lower second degrees did not feel themselves to be seriously disadvantaged. Nowadays many students feel that anything less than an upper second class degree will irretrievably damage their career prospects. At the same time, many have less time available for study because they are in effect 'working their way through college' or coping with heavy caring responsibilities. With the assessment stakes now so much higher, many people feel that cheating is much more likely to occur. At the same time, higher education institutions are becoming more

concerned about the issues because they are subject to more stringent demands to ensure that the degrees they award are valid measures of student achievement.

Biography

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What constitutes plagiarism and cheating?

Plagiarism and cheating are not clear-cut issues: despite the fact that most universities have written guidance and codes of practice, it is not absolutely clear what the definitions encompass, neither for students nor staff. The QAA Code of Practice Section 6 *Assessment of Students* requires in precept 5 that 'Institutions should ensure that assessment is conducted with rigour and fairness and with due regard to security' (QAA, 2000), but gives little other than general guidance on what are the implications of this.

Plagiarism

This is usually defined as passing off someone else's work or writing as your own. The student who, for example, incorporates large sections of published text into an essay or assignment without any acknowledgement is guilty of plagiarism as is the student who takes a whole essay, report or other kind of assignment, transforms it in some way, perhaps by changing the font or layout, and then hands it in as his or her own assignment. Some students will take bits from two or three essays and patchwork them together, others will take large sections from what they hope is an obscure published source, others still will download essays from web pages which are almost certainly set up to facilitate plagiarism, and others still might buy them from agencies or other students. Scanners enable any piece of printed writing to be loaded into a word processing package and then re-formatted by the student. It is sometimes only a matter of chance whether well-disguised plagiarism is ever discovered or not. One external examiner once famously regretted his disappointment in seeing an essay, which directly plagiarised one of his own journal articles, being only given a lower second mark!

There are, however, difficulties around unintentional plagiarism. Most academics will recognise the experience of becoming so immersed in a text or texts resulting in unconsciously parroting back sections of the article or book without realising it is almost word for word identical with the original. In other cases, students may learn model answers, perhaps from published study guides or study notes, off by heart and repeat them back in examinations or essays, without realising there is anything reprehensible in doing this. Indeed, some students may have been taught in the past or in different cultural contexts that this is exactly what they must do to succeed in exams. In these cases, it is difficult to prove intentionality, which is surely at the heart of culpability. There is certainly a job to be done in briefing students about what is and what is not considered appropriate behaviour in a higher education context and to help them to understand the importance of acknowledging the work of others in academic writing.

Cheating

Cheating is gaining an unfair advantage or breaking rules in assessment. Here again there are grey areas, although most of us would regard smuggling notes into an exam and copying from another candidate as straightforward examples of cheating. The QAA Code of Practice Precept 5 mentions specifically 'Impersonation and the submission of work that is not that of the student in work submitted for assessment'. (QAA, 2000 *op cit*)

However, it isn't surprising that students sometimes find the world of assessment confusing. At times we expect them to demonstrate the key skills of working together and sharing good practice and then at other times we blame them for sharing ideas when we want them to work as individuals. What is clearly necessary is to make it absolutely clear what we regard as cheating. We may not agree that all of the following examples are cheating, and some seem more blameworthy than others. They include:

- taking unauthorised material into exams. Ways of doing this are multitudinous and varied, including etching answers onto the sides of ballpoint pens, writing on arms and legs, taking in notes, gaining access to exam answer books and bringing into the exam room pre-prepared scripts;
- obtaining hints from members of staff about what will be on the exam to obtain an advantage;
- impersonation in exams, vivas, orals and other forms of assessment in person;
- getting special help from a lecturer to complete an assignment when this is not available to other students;
- obtaining special help from outside the university to complete an assignment, for example, getting advice from a friend who is an accountant to help you to complete a finance assignment, or getting a partner who is a musician to write your music assignment for you;
- discussing course-work with fellow students before completing it and handing it in, thus using their ideas to enable completion of an assignment that is designed to test individual abilities;
- working on parts of an assignment eg maths problems, diagrams, with fellow students so that you all come up with the same answers;
- recycling an assignment you have previously had assessed, for example on another module or at A level, with very little change;
- making up the results of an experiment or manufacturing data such as questionnaire answers;
- using references or quotations that are only approximate (or making them up altogether) because you can't quite remember the detail and haven't got time to check;
- getting an extension on an assignment by claiming illness when really there is no such cause for lateness;
- handing in an assignment late with a justified extension after other students have had theirs marked and returned, then getting the benefit of their experience;

Certainly all of these are regarded by some as cheating and some of them are regarded by everyone as doing so, but it is not certain that students understand which ones are and which are not acceptable.

What can be done about plagiarism and cheating?

It is safest to start from the assumption that cheating and plagiarism have always taken place and can't be totally eliminated. We therefore need to find ways to manage assessment that minimise opportunities for inappropriate behaviour and do as much as is possible to ensure that it doesn't pay. In order to combat cheating and plagiarism, we can use one of the following strategies.

Strategy 1: Use strict controls

One of the first ways in which many departments try to address issues of cheating is to try to eliminate any possibility of it occurring by devising strictly controlled assessment. Whilst no assessment is fully 'cheat-proof', some of the following control strategies are worth considering:

- Use well-invigilated unseen, closed-book exams. These will ensure, in almost all cases, that the student submitting the exam answers is the person he/she is supposed to be and that what is submitted is their own work unaided by the use of any written information. However such exams have many well-known disadvantages. Students can often get through and even do well by relying on question spotting and memorisation without developing a genuine understanding of the subject. At best, exams only test a narrow range of knowledge, skills and abilities. They have their uses, but a course that based all assessment on exams in order to exclude cheating would probably be an impoverished course and would, fundamentally, be unable to claim that it had assessed the wide range of skills and abilities which are currently demanded in graduates.
- Use computer-based tests. These have similar advantages to the conventional unseen exam but also provide other possibilities. For example, a computer-presented test can be based on a question bank with different questions selected for each student. This means that even students sitting alongside each other cannot easily copy the answers from each other. With a large enough question bank, students could even sit the test at different times and places without any great danger of them finding out from previous candidates what the questions were. Computer-based exams have many of the disadvantages of conventional exams and there is a view that they can only test basic knowledge. However computer-based testing software is becoming much more sophisticated and is no longer confined to simple multiple-choice tests. Good practice in computer-based assessment for summative purposes is being developed in many universities and the University of Luton has particularly good practice in this area developed through a TLTP project. See <http://www.caacentre.ac.uk/>.
- Conduct spot checks. For almost any form of assessment, a way can be devised to implement spot checks which will require individual students to present or justify their own work, without advance notice. For example, students working on a project could be called in at any time to explain and discuss what they are doing, perhaps in the form of an impromptu viva. It may not be necessary to interview all students. The possibility of an instant oral test might be enough to stop cheating. Where students submit weekly problem sheets for assessment, a spot check test could be conducted in which students are required to answer one of the recent questions in test conditions. This might not prevent students from working together on problem sheets but might ensure that all students try to understand what is going on rather than simply copying from

friends. A variant of spot checks has been used at the University of Sydney employing style editor software called Plague to recognise patterns in programs or writing thus alerting staff to possible copying or plagiarism (Habeshaw, 1998).

- Check for mark discrepancies. Automated systems could be set up to notify you of large discrepancies in an individual student's mark for different pieces of assessed work. Such differences may, of course, indicate that a student simply performs less well in, say, exams in comparison to course-work essays. Many students perform particularly well on dissertations for a whole variety of reasons such as the motivating effect of undertaking an extended, individual and self-selected piece of work. Nevertheless, large differences in marks, especially for similar forms of assessment might trigger an initial investigation although you would need rather more evidence before a more formal investigation into a possible case of cheating could take place. It would not, however, identify the successful, serial cheat!
- Check the identities of students being assessed. For example, students can be asked to show individual student identity cards including photographs before entry to the exam room. In some universities, individual swipe cards have been introduced as a further security measure. It is unclear, however, how even photocards can be used to prevent impersonation where students resemble one another closely, for example twins or other family members.
- Install strict controls on 'high stakes' assessment and worry less about the rest. Some assessment counts for very little towards a student's final grade. Often first year university courses are assessed and marks are given but only the distinction between pass and fail is important because it determines whether or not the student is allowed to continue the course. Similarly some assessment is undertaken to provide a focus for students and give them feedback and guidance rather than to certify the standard of their performance. If academics are more relaxed about the possibilities of cheating in such cases, they can enforce strict controls only where they want to be really sure and thus avoid constraining the assessment pattern of the whole course.

Strategy 2: Make the rules clear and have known penalties.

- We have already suggested that some examples of cheating and plagiarism suggest that there are some grey areas. If we are not completely sure what is acceptable then students are likely to be even less sure. It isn't always easy for students to understand what are the rules of the game, so the briefings we give them need to be explicit about the underpinning value system on which decisions are made and also must provide concrete examples of what it means in practice, as described above in section two, so that we can be sure that students are really aware of what cheating and plagiarism entail.
- We need to publicise the occurrences of cheating and plagiarism that we identify and punish (without necessarily publicly scapegoating the individuals concerned) so that students know that we mean business. It may be helpful to have a widely-publicised tariff of penalties so we can differentiate between different levels of unacceptable behaviour, or it may be best to regard all forms of plagiarism and cheating as defined in the institution's own terms as being equally serious disciplinary matters which will result in immediate expulsion. In these cases, we will need an appeals system that works speedily and is seen to be fair.
- Students can help to police each other. It will never be possible for academics to be aware of every incident of plagiarism, but fellow students usually know what is going on and sometimes connive at it. It may be possible in some cases to rely on fellow-students' sense of fair play and natural justice and involve them in 'shopping' students who do not play by the rules. However, we will need to ensure that our systems are sufficiently transparent and robust to deter malicious and false accusations.

Strategy 3: Design assessment instruments that make cheating difficult.

If we want to get to the heart of the problem, we may need to radically rethink the whole assessment process, so that students are working towards divergent rather than convergent goals, by the use of, for example, individualised negotiated assignments. Where students are meeting tutors over a period of time to discuss evidence of their achievement of required learning outcomes along individual pathways it is difficult for them to produce anything which is not their own work. Some possibilities are:

- Use open-book rather than closed book exams. If students are allowed to take material into exams you can more easily design questions which test their abilities to apply, synthesise and evaluate knowledge, for example answering questions based on a case study. Where they cannot take answers straight from a book or lecture notes, it will be very difficult for students to cheat.
- Use assignments which draw on personal experience and require evidence of it. Learning contracts, for example, involve students undertaking entry profiles, skills analyses, action plans and evaluation over a number of cycles (Brown and Knight 1994). Portfolios include individual evidence of achievement which will usually be different for every student. They would have to work just as hard to 'fake good' as they would to actually provide appropriate evidence based on their own practical and professional experience, which therefore provides them with little pay-off for the effort involved.
- Ask students to produce reflective journals and critical incident accounts which relate to students' own direct experience of learning in individual contexts. This is unlikely to involve cheating or plagiarism, especially where evidence can be triangulated by a practice tutor or workplace mentor.

- Use vivas and orals to verify that work undertaken is the student's own, for example in the PhD process, where searching questions are used to check the veracity and authenticity of individual learning.
- Design assignments which are different for each student, for example, asking students to produce annotated bibliographies, with each student being allocated or choosing a different topic.
- Devise assignments which require choice and individual activity related to specific contexts. Where appropriate, they can even design their own essay or assignment titles, with guidance from the tutor to ensure equivalence of experience with other students. These are unlikely to be able to be copied straight from a book or 'borrowed' from a fellow student.
- Use Computer-Based Assessment. As CBA becomes more sophisticated, it becomes increasingly more possible to design substantial comparable questions in a bank from which each student can be provided with a slightly different test.
- Use assignments which need to be authenticated by a third party, such as an employer or workplace supervisor
- Ask students to submit alongside their assignment photocopied extracts from the key sources they have used and to indicate how they have used them. This kind of assignment is helpful in showing students what plagiarism means and how to use sources properly.
- Use group assessment. Assessment of students in groups takes careful planning and full briefing (Brown, 1997), but the learning gain can be enormous. We can make a virtue of the collective impulse by asking students to work together on joint projects which enable them to bring individual strengths to the work but also gain from the knowledge and experience of peers, in a co-operative learning context. This, in the long run, is likely to have more success than trying to prevent cheating or trap them out when they do.
- Involve an element of peer assessment (Brown, 1998). Students who are involved in their own and each other's assessment tend to learn more co-operatively and tend to internalise what they learn more effectively. They also tend to be intolerant of time-wasters, parasites and absentees. There is no mileage in cheating or plagiarism when it is your peers who are monitoring your performance and you have little chance of pulling the wool over your peers' eyes!
- Give students tasks that require them working in learning teams. This makes the development of individual student's work well known to the whole team. They are able to build on others' ideas but can be penalised if they use other students' work without transformation. In group work, ensure that students acknowledge each other's contribution to process and product.
- Monitor the production of assessed work. Students can be asked to provide preliminary notes, rough work, early drafts, work in progress and so on either incrementally throughout the period of time available or with their final assignment. This is a disincentive to copying.

Strategy 4: Develop a climate that will reduce the likelihood of cheating

Whatever controls and clever schemes are introduced, students will find ways to evade them. The more widespread cheating becomes, the more likely it seems that other students will join in, with the justification that everybody is doing it. However there are factors in the teaching and learning context which can help to prevent cheating becoming prevalent. These hinge upon the relationship between students and their learning and between students and tutors and the university. If we want to stop students feeling that it is acceptable to cheat, we need to:

- Provide a good teaching and learning environment. Students who feel that they are not getting a fair deal from their higher education may respond by not 'playing fair' themselves. For example, students in Ashworth's study (1997) claimed that cheating might be justified if the teachers were 'using bad methods to teach us' or if books and resources were not available since these were preventing them from learning properly. On the other hand, if students felt that lecturers were really doing their best and had a commitment to the course and the students, then they were much less likely to consider cheating. You may worry that in today's resource climate students will inevitably be dissatisfied. However most do not have unreasonable expectations but become demotivated and dissatisfied by things which can be addressed. Examples are: lecturers who behave in insensitive and patronising ways; poor organisation and lack of practical information such as timetables; late return or non-return of assessed work.
- Design assessment, carefully that are 'fit for purpose' (Brown, 1999). There are a variety of strategies available to us which are likely to involve changing assessment methods as suggested above, and communicating to students what assessment is for and how it works. Students frequently talk about whether assessment is fair (Sambell *et al*, 1997), and brand as 'unfair' assessment that does not seem to assess anything of real value. They commonly believe that exams test 'useless information', purely memory or even how lucky you are in getting the right questions and are thus not fair tests of their actual abilities and achievements, so cheating is morally justifiable. Students are often demotivated by carrying out academic work which seems to be purely routine, such as lab reports which have been done by many students before them, using the same equipment, with identical 'findings'. In this situation they can feel that there is nothing for them to contribute and that they are simply going through the motions, so why should they bother to do it properly? In comparison, students do value and take seriously assessment which appears to have some meaning for them, for example, where they can see that they are developing skills and knowledge which will be relevant outside the university, or where they can express some choice and individuality in their work.

- Help students to take control of their learning. Students may feel powerless within their course, particularly in relation to assessment. They may feel like the victims of an arbitrary system with no sense that they can take positive steps to improve their performance. At the extremes this may lead to cheating in order to get by, because students do not see that other strategies are open to them. It is therefore important to be open about assessment, to explain what is required and give helpful feedback to individual students. This is not a one-off activity because it is a difficult and lengthy process to genuinely understand what is required in a particular subject and how judgements are made within it (Sambell and McDowell, 1997). Time spent talking about assessment, sharing and developing assessment criteria and engaging in self and peer assessment will be useful in a variety of ways, such as helping students to 'learn how to learn', in addition to reducing the likelihood of cheating.
- Provide assistance to students with difficulties. If we are able to identify students with problems in their studies before they get so desperate that they engage in cheating so as to get through the course, we may have some success. Students' difficulties may not always relate directly to their academic ability but to other factors such as stress, difficulties in coping with academic workload alongside domestic commitments and full or part-time work, financial problems and so on. Some can be assisted to cope, others may not be able to continue their studies but they can at least be 'headed off' before they get tempted into a major problem with cheating. For this and a number of other reasons, a good personal tutor system or other system for student guidance and support should help to reduce cheating, since it can reduce students' feelings of anonymity and alienation.
- Develop student motivation. All students will have motivation of some kind to have become students in the first place; what we need to do is to foster the kinds of motivation which will assist learning. Often motivation is classed as either 'intrinsic', such as wanting to learn a subject out of interest or for personal development or 'extrinsic' such as wanting to obtain good course grades. We should expect students to have a mixture of these kinds of motivations; it is the balance which is important. It is also vital to recognise that motivation is not a fixed characteristic of an individual student. Motivation changes over time and is influenced by the student's course experience. Newstead (1998) considers that student motivation may be one of the main factors underlying cheating. If students focus too much on grades and see no value or meaning in academic work they are more likely to cheat than if they see the point of learning and want to develop and learn. Unfortunately, there is some evidence that higher education can foster the wrong kinds of motivation. Overloading the curriculum, giving students a very high workload and using assessment methods that emphasise or require purely routine or rote learning can push students towards a surface approach to learning. This does not lead to developing understanding and the sense of personal satisfaction which would continue to nurture intrinsic motivation.
- Consider students' relationships with the course and institution. Ashworth (1997) draws attention to the influence of student alienation and the likelihood that this will lead to more cheating. We have already mentioned students' need to feel that their lecturers and the institution wish to help them in their learning. It is also important that academic learning has some personal meaning and value to students. The whole institutional context is also important. If students feel anonymous, badly treated and under-valued then this is fertile ground for cheating. Not only may students reason that it does not matter to anyone whether they cheat or not, they may also believe that, as one of the masses, they are unlikely to be caught out and that no one will be affected by what they do. Cheating appears to be a victimless crime and therefore less blameworthy.

Conclusion

It seems probable that whatever checks and balances we create, plagiarism and cheating will always be present to some extent in the assessment of student work and almost certainly always have been. Here we have suggested four key strategies to prevent it happening in the first place, to ameliorate its effects when it occurs and to promote conditions where to cheat becomes unworkable or unthinkable. In the long run, it seems likely that the last strategy is the one that is likely to have greatest positive impact, in that we need to change the nature of assessment and the teaching and learning context. It is in this area that our work continues, monitoring the impact of innovative assessment as well as evaluating and maximising the strengths of traditional approaches and trying to devise innovative solutions to match the complex problems of assessing learning.

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