

The 'new plagiarism', academic dishonesty and the development of critical thinking skills

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Abstract: In recent years, not only has there been an explosion in the numbers of webpages posted but institutions of higher education have encouraged students to exploit such resources in order to research assignments. The true nature of the extent and severity of plagiarism or poor academic practice is hard to discern with accuracy but some studies find that almost two thirds of students admit plagiarism. The reasons for this phenomenon could be said to lie in the increasing massification of higher education in which one third of the relevant age-cohort now enter higher education, a proportion which the government intends to raise to 50% within the foreseeable future. It is imperative that professional educators recognise that poor academic practice is an issue to which explicit attention needs to be paid and that policies should devote as much time to the inculcation of good academic practice as well as penalties for those students who knowingly and deliberately transgress academic standards

Introduction

All advanced industrial societies have witnessed two processes in recent years which have often proceeded in tandem with each other. On the one hand, we have witnessed the explosive growth of the internet and related technologies which has had a dramatic impact upon the methods of working of all aspects of commerce and industry, the professions, government and education. Several years ago, commentators such as Daniel Bell anticipated the coming of a 'post-industrial society' in which a society's industrial basis would be information-led and service oriented. Indeed, Bell is credited with renaming his concept of *post-industrial society* to *information society*, a term much more in common usage to this day. At the same time, we have also witnessed what has been termed the massification of higher education. By this, we mean the increasing proportion of the 18+ age cohort who are anticipated to extend their studies in a college or higher education environment. European societies have traditionally educated a lower proportion of this age-cohort to higher education level. Indeed, in 1961, the famous economist

Lionel Robbins reported that only about 4% of the age cohort were like to experience higher education in 1961 (Robbins, 1962). This proportion has risen to approximately 40% in British society at the time of writing and it is the avowed intention of the present British government that the proportion be raised to 50% by 2010. Some societies in the 'tiger economies' already have very high participation rates or have expanded higher education very rapidly in the 1990s.

These two trends have an interesting relationship with each other. On the one hand, an increasing number of students can be educated at little marginal cost by the increasing use of e-mediated learning technologies, particularly in the form of virtual learning environments (VLEs). The increasing flow of graduates is necessary to sustain a knowledge based economy in which the internet provides a technological underpinning. Evidently, the relationship between a knowledge based economy and the flow of graduates into it is not necessarily clear-cut – but these two processes do have a degree of mutual interaction which we must recognise.

A definition of Plagiarism

Plagiarism

Before attempting to discuss the incidence of plagiarism, it is necessary to clarify meanings implicit in the term. The essential points appear to be, following Carroll (2002) that someone else's work should be passed off, either intentionally or unintentionally as one's own in order to gain some benefit. There are other types of illegitimate activity within the student community which may or not involve plagiarism but is often confused with it. We can cite, for example, collusion between students to produce work which was intended to be individual, the breaking of copyright and outright cheating (such as the consultation of illegitimate material in an examination).

Estimates of the prevalence of plagiarism may therefore, to some extent, be contingent upon the definitions employed. The data drawn from a variety of sources does tend to indicate that no system of higher education is immune. Plagiarism may be seen therefore as one of a whole series of behaviours collectively described as academic dishonesty.

We can discern a whole range of activities ranging from the relatively trivial to the more serious. Amongst examples of academic dishonesty we can show:

- Not citing the author whose ideas have been particularly influential, either as a simple error of omission or as a result of a more deliberate intention
- Collusion with fellow students to produce similar or identical material (all too common in laboratory or some numerically based subjects)
- Making up of data or alteration of data to fit a particular case.
- The deliberate copying, without attribution, of one or two key phrases or sentences

- The wholesale copying of whole paragraphs, or sections of a work (which in extreme cases, might be the whole of the work in question). This could be compounded if the occasional word is changed to give the appearance that the work had not been substantially copied.
- Taking of unauthorised material into an examination or other forms of deliberate cheating
- Buying or downloading a complete work, usually an essay, that is then passed off as one's own.

If we were to adopt a very strict definition of plagiarism, then it is quite possible that many academics and their students who have experienced higher education may be guilty of some poor academic practice. But intentionality is the key here. One would not want to lay the charge of plagiarism against an unfortunate individual who forgot to include a citation in a List of References. On the other hand, the overt and deliberate attempt to pass off whole sections of a document or to buy a complete document from a 'degree mill' plainly fits even a looser definition of plagiarism but is not particularly common, at least in British society.

How prevalent is plagiarism?

Studies of cheating behaviour in the United States date from as far back as the 1940's as a study by Drake (1941) reported that 23% students admitted some form of cheating behaviour. This could indicate that such forms of academic misbehaviour be characterised as endemic. A classic study by Bowers (1964) reported that three quarters of a sample of 5000 students drawn from a sample of 99 colleges and universities in 1964 reported involvement in some degree of academic dishonesty. Thirty years later, a replicating study that included nine of the original colleges confirmed a modest increase in this proportion (McCabe, Trevino, and Butterfield, 2001). A more recent estimate has even claimed a figure as high as 90% in American high school students (Jensen, Arnett, Feldman and Cauffman, 2002) although other studies reported in Davis, Grover, Becker and McGregor (1992) indicate lower rates than this.

Studies in the British higher educational system rely upon similar self-report studies. Two of the most authoritative UK studies have asked students to self-report on a range of academic practices (Franklyn-Stokes, A. and Newstead, S., 1995; Newstead, S., Franklyn-Stokes, A. and Armstead, P., 1996). The data reported in these studies tends to confirm the impression generated by the American studies in that as many as 54% indicated that they had paraphrased material from another source without due acknowledgement but that outright cheating (such as copying from a neighbour during an examination) was not particularly common at 13%. However, a key finding from these studies indicated that two students out of five (42%) had admitted copying of material for coursework from a book or other publication without acknowledging the source.

A comprehensive survey (Pollinger, 2004) reported results that help us keep the problem of plagiarism in perspective. Some of the headline results from this survey indicated that:

- 75% of respondents had never plagiarized (9% once, 24% more than once)
- 47% do not believe that plagiarism was a problem at their institution (but 20% thought that it was)

- 1% had obtained essays from an 'essay-writing mill' (free, or for a fee)

However, more worrying were the low detection rates for plagiarism:

- Detection rate was about 3%
- 21% believe that plagiarism was not strictly enforced
- 26% did not believe that anti-plagiarism policies were very effective

As an issue, Plagiarism became a hot topic in British society in the early summer of 2004. Several recent events helped to raise the issue to prominence and ensured national coverage by newspapers and media such as the much respected 'Today' programme on BBC Radio 4. The survey by Pollinger (2004) referred to above received much prominence with the 'Times Higher Educational Supplement' reporting the results under the headline that 'Survey shows Cheating is Rife' ((Baty, 2004b). The survey contacted 600 members from a database of recent graduates from a wide range of institutions and 1,000 officers of the National Union of Students. A total of 363 responses was received, a response rate of 22.7%. The question was asked if they had ever

'inserted sections of text from any outside source into your own work, whether they are left whole or amended to conceal their origins'

The interesting feature of this survey was that three-quarters of the sample of students reported that they had never plagiarized despite the prominence given in the media to the one quarter who had admitted to the offence on at least one occasion (8%) or more than one occasion (16%). Taken in conjunction with the other surveys reported above, this figure might not be regarded as particularly high. However the non-response rate must be considered in this survey as we might reasonably infer from the 77% of those contacted who did not respond to the survey that some would find it embarrassing to admit to plagiarism and would not be particularly well motivated to submit a return.

That the issue had become a major concern to UK academics is the fact that the Joint Information Systems Committee, a body established to providing strategic guidance, advice and opportunities to use Information and Communications Technology (ICT) to support teaching, learning, research and administration had established the Plagiarism Advisory Service at Northumbria University in September, 2002. The first national conference sponsored by the Plagiarism Advisory Service was held in June, 2004 under the title 'Plagiarism: Prevention, Practice and Policies 2004' with the aim of raising awareness of the issues raised by plagiarism and provided a platform for 33 papers indicating current research into the problems and policies of plagiarism in the UK (JISC Plagiarism Advisory Service, 2004).

Two other events also received prominence at about the same time. A student who had admitted plagiarizing his way through his degree course intended to sue his university for negligence after he was caught out on the day before his final examination. (Baty, 2004a) The student was told by the University of Kent at Canterbury that a routine review of his English literature degree coursework 'has revealed extensive plagiarism from internet sources' The student argued that he was not aware that the activity of cutting and pasting material from the internet without attribution constituted plagiarism and therefore he concluded that the university failed to provide him with the required support and guidance. This case raises particular issues which will be discussed below.

An issue raised here is whether, perhaps inadvertently, a culture of practices has become established whereby students have learnt from a relatively early age that it is quite legitimate to cite material acquired from the internet without attribution. In British schools, it is now quite commonplace for formal modes of assessment such as written examinations to be supplemented by marks provided by coursework ('continuous assessment') and this proportion can be as high as two-thirds of the total. A survey of 2,000 mothers in *Real* magazine found that parents routinely admitted to 'helping' their children with homework in some way (Owen, 2003). Evidently, help can take many forms from advice and encouragement right through to the proof-reading and writing of material. However, some critics of the apparently rising pass rates at GCSE and Advanced Level examinations can be attributed to the use of coursework in which parents may well have had an undue influence. It is unlikely that formal citation skills such as the standard use of Harvard referencing is routinely taught to schoolchildren. Indeed, it is possible that they have been positively rewarded for demonstrating their intelligent usage of internet-acquired material.

To conclude this section, it does appear that the ready availability of materials acquired electronically is contributing to a rise in the patterns of behaviour of which plagiarism is the most prominent example. To some extent, it is possible to witness a 'moral panic' in UK society as issues have received prominence in the media as well as the more specialist periodical literature. It is possible, of course, that a fairly slow but inexorable increase in the reported incidence has led to a collective psychological 'tipping point' in which reports of plagiarism are now viewed as a serious source of concern. Whatever the current situation, the very fact of the establishment of the Plagiarism Advisory Service indicates a degree of official concern. And as this service reports itself in the preamble to its 2004 conference

'Plagiarism in student work is not a new phenomenon but technological advances in recent years have led to concern within the academic community that the incidence of this type of behaviour *is set to increase dramatically*' (emphasis added)

(JISC Plagiarism Advisory Service, 2004)

What is the 'new' plagiarism?

To the experienced professional, the internet has certainly become a boon in recent years. It is now possible to produce more widely researched, wide ranging reports and papers in a much shorter space of time than would have been the case in days when it was necessary to immerse oneself in a reference library and try to obtain original source material in the far-flung reaches of a library or even through inter-library loan. A process that would have taken days now can be accomplished in hours. In the hands of the accomplished professional, the internet can be seen as an indispensable aid to productive, modern working.

Accusations of plagiarism are certainly not unknown then levied against members of the scientific community. However, whilst not discounting the seriousness of academic fraud which certainly exists, most of the concern expressed in the literature base and in the popular media has been directed at the student community. Students are in a position to benefit most directly from the easy accessibility of material as their work will be graded and such grades contribute to an

exit qualification that will help to determine their chances in the labour market. On the other hand, they have less time or opportunity to absorb the cultural norms which guide the whole of the academic community. Indeed, many may enter with a completely instrumental attitude towards higher education in which academic work is seen as merely an obstacle course to be successfully negotiated in the course of getting oneself a 'good' degree. In the British context, approximately one quarter of students would have got a degree that was regarded as 'good' by employers i.e. classified as First Class or in the Upper Division of the Second Class (popularly known as a 2(1)) in the 1960's. But the increasing adoption of a more coursework oriented approach has, amongst other factors, led to a degree of 'grade inflation' in which at least 50-60% of British undergraduates now expect to graduate with a 'good' degree in 2004. This has made students increasingly litigious at borderline decisions (around the 60% mark) which can grant them or deny them the chance of an Upper Second Class degree. These pressures have been intensified by a regime in which to cope with the rapid expansion of student numbers, tuition fees were introduced for most students at the rate of £1,000 (\$1880) in 1998 to be followed, after a period of intense political debate by an increase in tuition fees to at least £3,000 (\$5,340) in 2005. This raises the total cost of a British university education to about some £15,000 (approx, \$27,000) which to a nation unaccustomed to paying directly for higher education has come as a great psychological shock.

The concept of the 'new plagiarism' was coined by McKenzie (1998) who argued:

'the *New Plagiarism* may be worse than the old because students now wield an *Electronic Shovel* which makes it possible to find and save huge chunks of information with little effort, reading or originality' (emphasis in the original).'

The same author suggests that original thoughts should be written in green ink (whether actual or metaphorical is a moot point) so as to display more clearly the points at which students are arguing their own case rather than relying upon downloaded material.

Reasons for plagiarism

There is a fair degree of consensus in the literature that plagiarism can be associated with the following clusters of factors:

- **Insufficient stress on the importance of referencing**
Typically, first year students will be given guidance in how to reference using a scheme such as the Harvard or Vancouver. However, often such instruction may be in the form of a handout or booklet ('Follow these procedures') and whilst the principles appear to be clear and unambiguous, all academics appreciate that referencing correctly calls for a degree of judgement. Additionally, first year students are typically drinking at a 'fire hydrant' of information that they have to absorb in their first year of study and principles of referencing may not be high in a student's list of priorities. The important point to note here is that the problem is essentially a *sociocultural* one rather than a *technical* one in that it is necessary to indicate to students the importance of being able to make a contribution to a debate only because they acknowledge the work of others.

- **Feelings of inadequacy**

This factor is comparatively under-researched and there is probably a need for more qualitative studies in this area. It can be difficult for experienced academics to enter into the minds and thought processes of college entrants who may well have some doubts whether they can match the standards of flowing prose that they encounter in their reading materials. Experienced tutors often discern an abrupt change of style when relatively halting English gives way to a series of latinate sentences of which Gibbon would be proud and replete with words (such as 'paradigm' and 'epiphenomenal') unlikely to trip off the tongue of the typical college entrant. Under these circumstances, students may well succumb to the temptation to cut-and-paste material which they feel expresses more eloquently than they are capable of the thoughts they need to express.

- **Collaboration and collusion**

Students are often encouraged under the influence of modern curriculum design to submit projects derived from a group working activity. In the case of numerical or statistical subjects, however, the tutor presented with figures in a report has no way of knowing whether the data is the result of a genuine and fruitful collaboration between all the participating members of a group or whether other group members have left this section of the report to one particularly numerate member of the group. There are often difficulties associated with the marking and moderation of groupwork. In the author's own institution, the problems are addressed by keeping the groups small (of the order of 3-4 members as a maximum to eliminate the 'passenger' who fails to make a sufficient contribution), and by asking students to maintain a learning log in which meeting times and tasks are signed off by all of the group members. Typically, also, the report will call for an individualised contribution in which a student analyses their own learning styles and learning experiences. Such solutions help to mitigate some of the problems associated with groupwork but cannot eliminate them entirely. Whilst students are encouraged to work collaboratively as part of their learning experiences, the assignment material may well have to be submitted and marked individually – but it is true to say that the lines of demarcation between collaboration and collusion are hard for the tutor always to draw and for the student to discern.

- **The more intelligent deployment of assignment strategies**

A tutor who utilises the same, standardised essay from one year to the next and uses the assignment with large numbers of students from one year to the next will hardly be surprised if a market emerges in which previous assignments are 'traded' in the student body. The answer here is a more carefully thought out assignment strategy in which tasks are set which can only be answered by one particular cohort of students. In the author's own institution, business studies students are typically asked to relate their academic material to a work organisation with which they are familiar (typically one in which they are employed part-time) and this helps to individualise the assignment strategy.

An interesting case study is given by Ryan (2001) in which students were given an assignment to prepare in plenty of time and then wrote an examination answer in 90 minutes, aided by one side of A4 notes. The author notes that the answers were more focused, crisper and original but being shorter were easier to mark and to hand back to

students. She feels that this episode helps to overcome several problems simultaneously by alleviating a large marking burden but also eliminating problems of excessive reliance upon course material almost overnight.

The development of critical thinking skills

Some academics are now arguing that it is now necessary to rethink elements of the higher educational system, assailed by problems of massification on the one hand and the all too readily accessibility of material on the other. One proposed solution is to give more prominence to critical thinking skills in which qualities such as originality, lateral thinking, critical analysis and synthesis are given much more prominence than the recall (some would say the regurgitation) of material. Of course, all higher education systems claim that a greater weight is given, as students progress through the system to more analytical approaches but for weaker students it is common place to be able to graduate in some subjects with an excessive reliance upon descriptive levels of analysis.

In the British higher educational system, it used to be common place to pay obeisance to what were termed 'key skills'. These were an employer-led initiative which influenced much of the school curriculum and moved to influence the curriculum of the higher education system itself. Key skills covered areas such as communication, the application of number, ICT (Information and Communications Technology), working with others, improving own learning and performance. More recently, this fashion has run its course and there is resurgence of interest in thinking skills, taught as a subject in its own right and examined at the 'A'-level stage.

The comments of teenagers exposed to a critical thinking AS-level (Advanced Level-Supplementary, equivalent to the first year of a two year GCE 'A'-level course) are instructive:

For Emily London there are more immediate rewards for being on the course: "I did a biology essay recently and my teacher guessed straightaway that I was doing critical thinking.

" Because I was able to pull apart the argument in the question I was given more marks."

"Critical thinking has helped to expand my mind and change the way in which I think about everyday situations and issues," adds Greg Sweet.

(Source: Hiscock, 2004)

The influential Qualifications and Curriculum Authority is now stimulating curricula and examinations in Critical Thinking skills for 13-17 year olds and it is quite likely that such developments will eventually impact upon the higher education system. Traditionally, the British educational system has prided itself upon the ability to extract high performances from the student body but the developments in a more utilitarian and vocationally oriented direction (as in *Key Skills* above) may have diverted attention for traditional, core academic values.

How will the development of critical thinking skills impact upon the problem of plagiarism?

The problems of plagiarism identified in this paper have been laid at the door of massified higher educational systems which have expanded (and to some extent been facilitated by) commensurate changes generated by internet-based technologies. To some traditional academics, the answer lies in more rapid detection, exposure and requisite punishments for the blatant cases of plagiarism that they encounter. But another view is now starting to gain more credence. This view is that it ultimately the responsibility of the academic community to clearly indicate its norms and to inculcate those in the student community. At the same time, more imaginative assessment strategies need to be devised so that the possibilities for easy plagiarism are minimised. The tension between the punitive and the educative approaches is recognised in the webpage of the Plagiarism Advisory Service set up by the JISC (Joint Information Systems Committee) which is responsible for much of the ITC strategies in UK Higher education. The JISC Plagiarism Advisory Service established at Northumbria University provides

‘..an online facility, which enables institutions and staff to carry out electronic comparison of students' work against electronic sources including work submitted by students at other institutions. The service is based in the UK and accessed via standard web browsers. JISC hope that this service will be a valuable support tool for institutions and staff in their efforts to prevent and detect plagiarism. However it is important to note that electronic plagiarism detection cannot solve the problem of plagiarism. Detection should be used as part of a wider approach to prevention. We strongly recommend that as well as making use of this detection facility, you view the advisory services web page and consider the recommendations on good practice provided. ‘

(JISC, 2004)

Conclusions

Internet technologies have enabled the members of academic and professional communities to become much more productive in their working lives. However, to the student entrant to higher education there is much to be taught in the legitimate uses of the internet. The commonly heard expression ‘I found it on the net’ can disguise the fact that traditional academic skills of locating and assessing source materials through the use of bibliographical searches has to some extent been held in abeyance by the rapid adoption of internet-based technologies. As students learn or re-learn the traditional academic skills of referencing, of establishing the provenance of their sources (a skill more typically associated with historians than other members of the academic community) and developing an attitude of organised scepticism towards the material that they uncover, then this can only be to the good.

This further implies that knowledge that is often ‘taken-for granted’ may need to be more specifically taught, rather than caught. Students may be encouraged to appreciate that much of what appears on the ‘surface web’ rather than the ‘deep web’ if of spurious academic value, that there are traditional and equally good resources available in many university libraries and that their attempts to think more imaginatively and critically in their chosen subject areas will be rewarded. In this way, the problems associated with plagiarism may well be alleviated if not put into reverse.

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