Contract Cheating: The Outsourcing of Assessed Student Work

Thomas Lancaster* and Robert Clarke
School of Computing, Telecommunications and Networks, Birmingham City University, Birmingham, UK

Abstract

This chapter reviews the issues associated with contract cheating, loosely defined as the outsourcing of student work to third parties. The chapter is intended to serve as an overview of current research while also providing practical instruction and guidance to academics and educators.

The discussion begins by introducing contract cheating and comparing this specific form of academic misconduct with student plagiarism. The suggestion is made that current anti-plagiarism methods are not suitable for contract cheating, defined as where a student is requesting an original bespoke piece of work to be created for them. Six types of services that students can use to have work produced for them are listed; these are (1) essay writing services; (2) friends, family, and other students; (3) private tutors; (4) copyediting services; (5) agency websites; and (6) reverse classifieds. Specific challenges associated with each service are provided.

Findings related to the wider contract cheating area are given. This includes particular discussion of the research into agency sites, where a student makes the offer of work available to a large number of people who then bid to complete it. The student selects one of the bidders to complete the work based on a form of cost-benefit analysis. Issues considered include the extent of contract cheating, the cost and quality of outsourced work, and the range of subjects in which students are cheating.

The chapter concludes with a discussion of the main methods that can be used to prevent contract cheating. Research into technical solutions, such as stylometrics, put in place to find automated technical solutions to detect contract cheating, is also presented.

Introduction

Contract cheating has been defined in the academic literature as the phenomenon through which students employ or use a third party to undertake their assessed work for them (Clarke and Lancaster 2006; Lancaster and Clarke 2007b). Of much interest to researchers and academics in this field are the mechanisms through which contract cheating is being enabled, the published and verifiable research into contract cheating, and what individual lecturers and teachers can do about this form of academic misconduct.

This chapter begins with a proviso. The contract cheating field is unusual as far as academic research goes in that published academic research is limited, although such research from a variety of academic contributors is included in this chapter. Some potentially contentious information sources stem from investigations conducted by the media. Other information comes from the large archive of presentations given by the originators of the term contract cheating, Clarke and Lancaster, which expand upon much of the traditionally published work. These varied sources are used to support the chapter and to provide an up-to-date overview of the field.

A particular background source used for preparing this chapter has been a set of detailed open educational resources and training workshop materials produced for the Higher Education Academy

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*Email: thomas.lancaster@bcu.ac.uk

(HEA) (Lancaster 2014b, c). These are referred to extensively where appropriate, as they provide both a summary of work within this field and many practical examples. The HEA also supports discussions about contract cheating through a designated online Contract Cheating Special Interest Group (n.d.) which has helped to grow the field of knowledge.

A further complication is that the contract cheating research also overlaps with other forms of academic misconduct. As an example, students using an essay writing service to produce work are committing a form of contract cheating, since they are paying to have work completed for them. There is no attempt in this chapter to review every published paper which refers to behaviors similar to contract cheating. The intention of this chapter is to bring together information of interest to the learning community about the contract cheating field and to deliver this in a clear structure.

Due to its very nature as an activity which students would seem to not want to openly admit, much of the detail about contract cheating is unknown. For instance, there are no complete and reliable results that confirm the true extent of contract cheating, and there is little evidence to support the fallacy that students who are contract cheating are being detected.

Background and Examples of Contract Cheating

The first use of the term contract cheating dates back to a study by Clarke and Lancaster (2006). This study explored how students were using the Rentacoder website (n.d.) to pay other people to do their work for them. Rentacoder is no longer in operation, having been taken over by a competitor, but the type of site, of which there are still many, has since become more formally defined as an agency site (Lancaster and Clarke 2012). Some sources also refer to Rentacoder as an auction site.

Like many agency sites, Rentacoder operated a public bidding process, whereby a student or business could post the work they wanted completed online. Once a job of this type was posted, other parties would bid to produce this work for them. For businesses, these requests for work usually fell within the wider field of technological needs. For students, this typically constituted a request to produce assessed work. Students would usually look to employ a worker who would complete assessments for them for a low amount of money. Rentacoder initially raised the interest of researchers since the requests for work to be completed and the records of the bidding process were public. This meant that statistical data on the use of the service could be collected.

Due to the operational nature of Rentacoder, which began as a service for companies to get technical solutions produced for their information technology problems, much of the student work found on Rentacoder came from the computing academic discipline. Simple examples included programming assignments in languages such as Java and C, database assignments, and spreadsheet work.

Students outside the computing discipline requiring written work typically have other options available. Here, essay writing services state that they will produce assessed work for students, with examples of these cited by Stavisky (1973) back to the 1950s. Modern essay writing services may instead call themselves consultancies, but the underlying principle is the same. While a typical essay may seem like the most common assessment option needed by students, other types of work can also be provided by such services. For instance, the provision of PowerPoint slides and associated scripts, admission essays for college or university, or full research dissertations and project work has also been commonly seen online (Lancaster 2014c).

A further consideration is that students have been seen asking for longer work to be produced in stages. Lancaster and Clarke (2009) show a simple example of this where a student is required to provide a technical design and then review it after feedback and further instructions. This feedback can all be passed

on a hired contractor. Further examples of staged work include early plans for essays or chapter-by-chapter delivery of dissertations.

A clear distinction between contract cheating and wider forms of plagiarism is useful here. Plagiarism is usually defined as being where a student takes the ideas or words of another person and uses them as if they were their own and is defined as much in many sources (Culwin and Lancaster 2001; Lancaster (2003, 2013b). Contract cheating represents a form of plagiarism, since a student is using work produced by a third party.

The challenge of contract cheating comes largely during attempts to detect this form of academic misconduct. Whenever a student has plagiarized by taking material from a textbook, journal paper, website, or other location, a source document for that work is available. Modern similarity detection engines, such as Turnitin (n.d.), work because they are based on having access to a whole series of text documents against which plagiarism attempts can be mapped (Lancaster 2013d).

Contract cheating is constructed by a writer for submission and has to be considered as original work. This means that a similarity detection engine, such as Turnitin, will not identify that the work submitted matches other external sources. Hence, current technical methods for detection will not work, unless the contracted writer has themselves taken shortcuts and reused material from other sources. This is unlikely, as it would not provide that worker with a long-term business model once their use of shortcuts became known.

Since contract cheating is being considered to produce original work, this also means that a tutor looking to take a contract cheating case forward to an academic integrity panel will not usually have the benefit of being able to show where the student copied the work from. Alternative mechanisms and evidence are sometimes available. For instance, this may include a copy of the online public bidding process showing the request made online by a student to have the work produced for them.

Six Main Contract Cheating Services

The HEA workshop materials on contract cheating have suggested six categories of sources used by students for the purpose of contract cheating (Lancaster 2014c). These are

1. Essay writing services
2. Friends, family, and other students
3. Private tutors
4. Copyediting services
5. Agency websites
6. Reverse classifieds

1. **Essay writing services**
   Essay writing services seem to be positioned and advertised widely to students. In a media interview one UK-based site stated that they had supplied 11,470 custom essays in 2012 (Matthews 2013). Essay writing services are often found online, so these sites that can be used for cheating are immediately available to students based across a large geographical area. Essay writing services can also operate at a local level. An example of this, as shown in Lancaster (2014d), is where business cards advertising essay writing services have been distributed directly to students.
   Essay writing services alone have been estimated to produce $100 million USD per year in revenue, of which half of this is said to be profit (Owings and Nelson 2014). This suggests that such services operate on a large scale and pose an immediate threat to academic integrity.

2. **Friends**, **family, and other students**

   The role of friends and family in contract cheating-like processes is of concern to academic institutions. When any work is completed independently from a classroom setting, it is difficult to confirm which person has produced it. Friends and family able and willing to write essays for students seem easy to find for many. This could be well meaning but exceed the boundary of where a student should be expected to produce their own work. Likewise, other students on the module can be asked to provide an additional version of an assessed piece of work for a friend. It also seems likely that students in a higher year can offer support to students in lower years, particularly where this work seems easier to them than their current assessments.

3. **Private tutors**

   Using a private tutor can be a routine method for students to obtain extra support with subjects that they find challenging. The difficulty, from a pedagogical perspective, is ensuring that the private tutor does not end up producing the assessed work, or creating so much of it that it is impossible to distinguish the student's work from the tutor's. Further, some private tutor's advertising appears to thinly disguise that they are really providing a contract cheating service. For example, Lancaster (2013c) provides an example of an academic researcher who is advertising online both private tutoring services and the offer to produce original work for students.

4. **Copyediting services**

   Copyediting services are designed to review and improve the writing style in work originally produced by a student. Depending on the level of editing, the finished student assessment may bear little resemblance to the work that the student themselves created. Hersey (2013) found that requests for work to be completed were ingrained within copyediting processes. As an academic also working as a copyeditor online, she witnessed a move toward students asking for work to be completed for them from scratch. She also noticed that many other company workers were willing to produce work for a student, even if she was not.

   A related possibility here is that copyediting services found within academic institutions could be misused. For instance, it has been identified that a student could request help multiple times from multiple people until the new work bears little resemblance to their original (Lancaster and Clarke 2008).

5. **Agency websites**

   Agency websites are those where a student can outsource the production of their work based on a competitive bidding process (Clarke and Lancaster 2006). Here, a student posts details of the work they want completed. Workers then quote the price that they would like to complete the work for the student. The student can then select from among those workers putting in a bid.

   Much of the current research looking at the extent of contract cheating works through an analysis of the agency site model. This is because records of the requests for works and the bids made by workers are public, providing information that a researcher can use. Due to this, there are examples available of how students are using these sites to cheat and how cheating behaviors can sometimes be detected (Lancaster 2013b). Some essay writing services have also been observed to operate internally using a private version of the agency site model (Bartlett 2009; Hersey 2013). This means that prospective writers see the selection of essays that have been requested inside a private website. They can then themselves bid to write these assignments, potentially helping to keep the cost of the essay writing service hiring workers down.

6. **Reverse classifieds**

   The reverse classified method of cheating is where a student elects to advertise that they need work created for them. This has been observed to happen when students use small ads or classified sites on the Internet. For instance, Lancaster (2014c) provides an example of a student posting on an online

forum for people looking to buy and sell digital information. That example is a request for a 2,500-word English language college-level essay, for which the requester will offer $50 if the work is returned today. Further details about the assignment are not known, as it is assumed that interested parties would then change to private communications to find out more.

Requests to have work completed have also been seen posted in subject-specific online forums. For instance, Clarke (2008) includes a list of sites on which requests for students to have work completed for them have been observed. Examples of sites for programmers, as used in the computing discipline, are particularly prominent on this list.

Contract Cheating Research Findings

Much of the work on contract cheating is facilitated through the use of the Internet. This is a fast moving field and so research findings can be used to indicate contract cheating as it is now, but cannot be considered fully definitive for future reference.

The first contract cheating study, published in 2006, looked at exclusively at the agency site Rentacoder (n.d.) to see the extent to which it was being used for contract cheating (Clarke and Lancaster 2006). An exhaustive search examined 803 requests for work of all types to be completed that were posted over a three-week period. The study showed that 99 out of 803 (12.3 %) of the requests were from students looking for contract cheating solutions.

A second part of the initial study into contract cheating reviewed a sample of 236 users, all of whom had placed at least one contract cheating request on Rentacoder over a 2-month period. The results suggested that repeat offenders were common, with over half of the users having placed between two and seven requests for contract cheating. It could also be inferred from these repeat attempts that the students who were cheating were not being caught at their local academic institution.

A final part of the study identified that six out of 236 of these users had placed 51 or more requests on Rentacoder. Analysis showed that these requests covered such a wide range of subjects and that they were not likely to be requests from a single student. Subsequent research has named these users as intermediary contractors (Lancaster and Clarke 2012). This might represent a third party who is taking orders for assignments to be completed from a range of different students, then themselves outsourcing these through an agency site. The intermediary contractor could profit by charging the students a higher price than they pay the worker they employ, a form of arbitrage.

The academic disciplines that students were requesting contract cheating from have also been analyzed across multiple studies, outlined below. While the initial studies of Rentacoder mainly identified cheating on computing subjects (Clarke and Lancaster 2006; Lancaster and Clarke 2007a), a study of a more general site which is no longer operating in its original format, EssayBay (n.d.), showed a wider spread of subjects (Lancaster and Clarke 2012). The study identified 627 requests for assignments to be produced. The top academic subjects found, ranked by the number of requests, were (1) business and administration studies, (2) social sciences, (3) history and philosophical studies, and (4) subjects aligned to medicine.

A 2014 study of the website Transtutors (n.d.) showed that 71 out of 174 (40.8 %) assignments posted were from the field of business and finance and 40 out of 174 (23.0 %) were from computing (Lancaster and Clarke 2014b). These are two fields for which contract cheating seems particularly prevalent. Other papers have also indicated that contract cheating within the wider business academic discipline is of particular concern (Wellman and Fallon 2012), with a suggestion that as much of 40 % of assessed work on one business course was externally purchased.

Students have been shown to be willing to cheat and to assist other people with cheating. The behavior has been mathematically modeled (Rigby et al. 2015). This saw a study of 90 second and third year

students at three British universities in humanities and science subjects. The universities from which the students were sampled were not identified in the paper. The study saw students randomly presented with eight fictitious offers to purchase an essay for their module, along with prices and the expected grades that they would receive. They were asked to confidentially indicate if they would be willing to purchase the essay. The resulting decisions were combined into groups and larger-scale implications were inferred using the choice experiment method. 50 % of students said that they would purchase at least one essay, with 7 out of 90 students willing to purchase on all eight occasions. The other 50 % of students said that they would not purchase any of the custom essays offered. Students who were likely to fail the module were shown to be more likely to agree to contract cheating than those who were expected to succeed.

Students have confessed to purchasing work in other investigations. A media survey of 180 students at East Carolina University (Ruiz 2014) found that 15 out of 180 students (8.3 %) said that they had paid someone to do their work for them. A higher number, 18 out of 180 students (10 %), said that they had been paid by another student to complete assessments on their behalf. Trushell et al. (2012) found that 45 % of students on a final year education module in a modern British university admitted cheating behaviors. This extended beyond contract cheating, including using tactics such as social engineering, strategic choice of essay titles, using technically impressive jargon, and falsifying references.

Several investigations have looked at the quality of work produced by contract cheating and found it to be variable. In an early media investigation, three written to order essays on copyright law were all found to be below the United Kingdom upper second standard, the standard expected to be achieved by the majority of higher education students. Despite not reaching this standard, all were said to be good enough to pass (Levinson 2005). Similar observations about the quality of work were made during investigations undertaken with the British Broadcasting Corporation (BBC) in 2012 and 2014 (Coughlan 2012; "MP to raise essay-writing firm concerns," 2014). In these cases, the quality of the work was also said to be neither too good nor too poor, to raise the suspicion of academics grading the purchased work.

The price of work produced by contract cheating has also proven to be varied. In 2005, an investigation by Oppenheim identified costs between $216 USD (United States dollars) and $328 USD for a 1,500-word essay created through standard essay writing services (Levinson 2005). An essay of similar length outsourced through the Unemployed Professors (n.d.) agency site in 2014 cost $130 USD (Fenn 2014). A 2014 media investigation contracted an essay writing worker through a local US classified site. That essay cost $95 USD (Lavin 2014). The prices listed here are converted to US dollars if this was not the original currency, based on one British pound being worth $1.60 USD, and are rounded to whole dollar values.

A 2013 investigation looked at the cost of outsourcing a 10,000-word undergraduate dissertation in a business discipline (Lancaster 2013c). Outsourcing using an agency site found multiple offers at prices as low as $250 USD, with a typical essay site pricing the production of this dissertation at $762 USD. The same investigation observed that outsourcing a solution from a UK-based supplier, presenting themselves as delivering a premium service, was quoted at $6,400 USD. This included the option of delivering the dissertation in sections to gain feedback from the dissertation supervisor.

A 2013 study of 336 requests for work on the Freelancer (n.d.) agency site found an average cost of $101 USD each, although this covered a wide range of potential types and lengths of work (Clarke and Lancaster 2013). By contrast, a specific study outsourcing the production of computer code priced assessments at between $8 USD and $26 USD each (Jenkins and Helmore 2006). This may suggest that contract cheating services, when used strategically, can prove to be a good value.

The effort required for a contractor to complete a piece of work on behalf of a student has been identified. Bartlett (2009) found contracted writers producing ten essays or more per week. Lavin (2014) spoke to a writer delivering between 40 and 50 essays a month, particularly in the nursing discipline, which is a similar figure to that identified by Bartlett (2009). A more formal 2014 study of the turnaround

time of contract cheating through agency sites suggested a maximum of 5 days (Wallace and Newton 2014). The observations directly from contractors suggest that multiple assignments can be produced in a single day, if necessary. All of these indications suggest that there is a ready and waiting pool of workers there to do work for students for cash.

The Detection and Prevention of Contract Cheating

Since contract cheating produces original work, detecting it, either manually or through the use of specialized software, has proven to be difficult. It is therefore helpful to think of both the prevention and detection of contract cheating as linked concepts. The threat of detection also provides a deterrent to students. Automated detection techniques are currently at an early stage of development, so this is an area which could benefit from further research.

Much of the success of an approach like this requires the support of teaching staff. Systematic professional development on contract cheating, involving all staff, may be a solution. If so, framing this around detection and prevention may be one approach to engage staff in the local discussions needed.

This section contains suggestions about how contract cheating can be prevented and detected. These are largely distilled from a previous contract cheating workshop (Lancaster 2014b), except where otherwise indicated.

Detection of Contract Cheating

Most contract cheating is currently found using a manual approach. This role is currently dominated by a small number of people, referred to as contract cheating detectives, who voluntarily look for cheating attempts on agency websites. An example cited in many talks, such as in Lancaster (2013c), is that of Robert Clarke, who provides information to other academics when a request for their work to be completed can be identified online. The role is also more formally defined as part of a contract cheating detective process but is noted to be labor intensive for individuals (Lancaster and Clarke 2012).

The detective role could be expanded at a local academic institution level with tutors looking online for their own assignment details. The use of a reward mechanism, where students can identify where other students have cheated, is possible, but there may be ethical issues to consider before this could be adopted.

Manual methods of detection can be difficult due to the lack of tool support. The use of Google Alerts (n.d.) may provide one method that academics can use to receive an immediate and automated communication when a new or edited web page refers to their assignment.

Google Alerts, or manual searches, can be aided by making assignment details unique and easy to search for. As well as using standard search terms, such as their name or course code, academics can also include unique or unusual words or word combinations within their assignment details. When these words then appear in a Google Alert, it is very likely that the listed web pages are related to the assignment being discussed. This may alert academics to contract cheating attempts, or just a breach of the copyright of their materials. An example of a suitable search term would be a unique place name which has been identified solely for use within this piece of assessment. However, such a mechanism would only work if students knew not to change the place name to something that would be searched for.

The way in which an assignment brief is constructed is also important. In order to aid in the attribution of a particular academic or institution, visible embedded text markers (known as watermarks) that are hard for students to remove are needed. Ideally, these will include contact names and contact details, such as a

direct email address. A further suggestion is that the assignment briefs are provided in a secure PDF format, so as to make sharing their contents more difficult (O'Malley and Roberts 2012).

Attribution of individual students can be improved if each student receives a unique version of their assignment brief. That assignment brief should have the student details embedded within it. The use of invisible watermarks, such as unique line spacing, can also be useful if a student attempts to remove the visible identifying features before placing the assignment brief onto an agency website. Previous examples of individualization have shown that giving students a unique set of exercises will allow for the identification of a particular cheating student within a larger cohort (Lancaster and Clarke 2010).

More sophisticated suggestions relating to detection have proposed automated detection processes for contract cheating, based around monitoring the contents of agency websites (Clarke and Lancaster 2007). A proposed six-stage process, comprising of (1) publication, (2) collection, (3) identification, (4) attribution, (5) notification, and (6) investigation, modeled the way in which assignment briefs could be submitted to a suitable database. When a request for that assignment brief to be completed appeared on an agency site, it would then be possible for an automated or computer-assisted process to notify the academic who originally proposed that assignment.

A further development of this process has proposed the use of context-aware technology, relying on artificial intelligence techniques to learn about particular students (Lancaster 2013a; Lancaster and Clarke 2014a). At a very simplistic level, a contextual comparative might include the stated location of a student asking for work to be completed, which could be checked to see if this was near an academic institution. It would take multiple contextual comparatives used in parallel to provide an artificial intelligence system with a high degree of confidence in its results.

One of the current areas that seems to show promise, perhaps due to its overlap with computational linguistics and the ability to tap into the skill base of that academic discipline, is stylometrics (Culwin 2008; Stevenson 2010; Wieder 2011). This computational approach requires the writing style of individual students to be automatically tracked throughout their course by collecting all pieces of writing electronically. The intention is that software would identify when the current writing style of a student differs from what the style of assessments that they wrote previously. This may suggest that someone other than the student wrote that particular assessment. It has been suggested that similar methods will also work for computing assignments involving programming (Koumantaris 2011). The use of visualization techniques, so that suspect students and sections of writing can be identified, has also been suggested to offer potential guidance for humans investigating plagiarism and contract cheating (Lancaster 2003; Lancaster and Culwin 2004; Lancaster 2004).

Despite the research interest, there are some challenges with stylometrics that still need to be overcome. The common application of these techniques requires gathering a large amount of work that is known to be written by the student in question. This can be difficult early on in a course, or when a student has already been using a third party to produce work for them. Such writing samples would therefore likely need to be gathered during supervised conditions. Further, any software would need to allow for the improvements in student writing style that could be expected to take place during an advanced academic course of study.

To aid detection, an appropriate tool, such as Turnitin, should be used for written work. While Turnitin will not detect contract cheating, studies have shown some initial success in picking up indicators of contract cheating based on small fragments of identifying text (Lancaster and Clarke 2014b). Further, Turnitin has been shown to help with the process of attributing the academic institution and the teaching staff who originally set the assignment briefs found posted on agency websites (Lancaster and Clarke 2014c).

Prevention of Contract Cheating

Progress toward the detection of contract cheating seems to be slow. It is perhaps, therefore, in the prevention and deterrence of contract cheating where progress can more quickly be made. As with the detection sections, these suggestions are largely distilled from previous workshop efforts (Lancaster 2014b) unless otherwise stated.

One area identified with potential immediate impact would be instilling upon students the benefits that come for them when they produce their own work. It would help students to have an understanding that they are being assessed in order to help them to develop their own skills and to ensure that they can demonstrate that they have subject expertise. Taking shortcuts will not help students in the longer run if they are missing the skills needed to have a successful career. Further independent suggestions have been made that this can be accompanied with a discussion of wider ethical implications of deception as well as the failure to gain essential skills (Walker and Townley 2012).

To prevent contract cheating, it is essential for institutions and individual academics to consider the ways in which they formulate assessment. Much work has already been done to educate academics that they need to carefully design assessments to prevent plagiarism, so further education to prevent contract cheating seems like a natural extension. There are many discussions available of methods through which academics can write suitable assignment briefs, for instance, in Sutherland-Smith (2008). Some examples of methods applicable to different subject areas may be through industrial simulations or by requiring students to develop a professional portfolio; this could also be used to aid students in their future employability.

Alternatives to coursework can also be considered. These might include examinations, tests, and practical assessments in various forms (Lancaster 2014a). There are several options. Such an examination can entirely replace the use of coursework in a module. An examination could also be used as a smaller portion of a larger module. The examination could also be a component of the module in which it is necessary to achieve a pass. If the exam was failed, the entire module could be scored as a fail, regardless of the performance by the student in the coursework component. However, such an approach is dependent on the individual policies of academic institutions and moving toward an examination-based system may be considered as a retrograde step.

A test can also be directly linked with a piece of coursework. For instance, a student could be asked to improve upon, reflect on, identify the sources used for, or make a small adjustment to a piece of coursework that they have submitted under examination conditions. The idea is that a student will be much more familiar with work that they have put the time and effort into creating themselves. A student showing less understanding than would be expected at this point may not have been fully involved during the creation process.

Similarly, if assessment regulations allow, a viva voce examination with spoken questions can also be used during a longer assessment process. In this form of assessment, a student can be quizzed on the contents of their assessment and asked to clarify and explain particular points. Alternatively, a spoken examination can be used as the sole item of assessment for the module. The main disadvantage of the viva voce approach is the time-consuming nature for large classes. A second disadvantage is the need to ensure that all students are asked questions that are of equivalent difficulty but also provide them with the opportunity to showcase their wider understanding of the area of topic. Some students may also find this type of assessment difficult due to anxiety, which could hamper their performance.

The way in which assignment briefs are structured can be amended, so as to make these difficult to complete by a third party. For instance, this can be done by requiring the additional of localized

knowledge which cannot easily be replicated from a remote setting. As well as geographical knowledge, this can be as simple as requiring students to incorporate examples that have been verbally discussed during their course. A reflective element can also be added to assessments, perhaps through relating them to a larger course of study as a whole.

One approach, used for a science subject, saw students required to write up the results of their experiments under supervised conditions, akin to an examination (Cogdell and Aidulis 2007). Students were also required to attend appropriate workshops. These included a workshop on writing, where students were required to demonstrate core skills, such as referencing and summarizing. This also included a workshop on research and workplace ethics. Such a multi-tailored approach, incorporating assessment redesign with an ethical and practical education, was seen to work well and could be applicable for contract cheating.

Many assessments are taken by students individually, which immediately provides them with a lack of supervision and eliminates peer pressure. Team elements can be added to these assessments, requiring students to work together. As well as simulating an industrial setting, this makes it hard for a student to escape from their team commitments and so does not give them the opportunity to outsource the production of their work. However, the problem of social loafers, which can lead to some students receiving qualifications that they do not deserve, has also been identified, and so careful assessment design to reduce the impact of this issue is needed (Brooks and Ammons 2003).

The use of Honor Codes is a related area, where all students are expected to report their suspicions of cheating by their peers. A student who does not report cheating that he or she suspects is said to be complacent in it and so will be considered to be equally culpable. The literature on Honor Codes seems mixed about how successful Honor Codes are. For instance, established Honor Codes seem to largely provide an effect of deterrence (McCabe and Trevino 1993); however, the diversity of student groups and the American feel of Honor Codes have also been found to be restrictive to further extension of their use (Yakovchuk et al. 2011).

A solution, reported by the media to be used at East Carolina University (Ruiz 2014), is to have so many deliverables in a course that cheating becomes financially untenable. In the article, Dr. Stan Eakins is cited as saying that he requires students to complete 60 deliverables for his course. However, such an approach may not be realistic in many academic institutions, where the issues of assessment loading on students and marking loading on staff have to be considered.

Summary

The wider issues relating to contract cheating are there for universities and higher education institutions to solve. The academic community needs to decide how it can be that writers can move from one academic discipline to another, sometimes turning out multiple assignments in a single day and still be producing work that is judged to be of a passable quality.

Technology means that more students are being exposed to the opportunities presented to them to commit contract cheating. They are also having such cheating opportunities advertised to them through social media from an earlier age in the educational sphere. The technologies that are causing problems need to be repositioned and used instead to the benefit of academics and to reward the substantial majority of hardworking students.

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