This is an author produced version of a paper published in:
Assessment & Evaluation in Higher Education

Cronfa URL for this paper:
http://cronfa.swan.ac.uk/Record/cronfa18149

Paper:

http://dx.doi.org/10.1080/02602938.2014.956282

This article is brought to you by Swansea University. Any person downloading material is agreeing to abide by the terms of the repository licence. Authors are personally responsible for adhering to publisher restrictions or conditions. When uploading content they are required to comply with their publisher agreement and the SHERPA RoMEO database to judge whether or not it is copyright safe to add this version of the paper to this repository.

http://www.swansea.ac.uk/iss/researchsupport/cronfa-support/
Abstract

Contract cheating is the process whereby students auction off the opportunity for others to complete assignments for them. It is an apparently widespread yet under-researched problem. One suggested strategy to prevent contract cheating is to shorten the turnaround time between the release of assignment details and the submission date, thus making it difficult for students to make arrangements with contractors. Here we outline some characteristics of the current market for contract cheating and demonstrate that short turnaround times are unlikely to prevent contract cheating because requested turnaround times for university-level assignments completed via contract cheating are already short (average 5 days). In addition, for every contractor awarded a job, there are an average of 10 others offering to complete it within the specified time suggesting that there is abundant excess capacity in the market.

Introduction
Many aspects of modern life have undergone a dramatic change in the last generation due to the emergence of the internet and the ready availability of information. One unwanted side effect of the information revolution in education is the emergence of so-called ‘contract cheating’, wherein students pay to have their assignments completed by an independent contractor (Walker and Townley 2012). Contract cheating was initially described in the areas of computer science and information technology (Clarke and Lancaster 2007) but now appears to be widespread across disciplines and has attracted considerable media attention. Despite the publicity surrounding contract cheating, there are very few scientific studies of the issue and thus it is difficult to devise any evidence-based approach to addressing it.

The work generated by contract cheating is, in theory, original and thus evades originality detection software. It is therefore difficult to accurately estimate the extent of contract cheating. Unpublished survey data from the software company Turnitin show that 7% of students in higher education self-report having purchased an assignment (Turnitin 2013). A related phenomenon is the use of material from so-called ‘paper mills’ – companies with large repositories of pre-written essays. An old (relative to the emergence of contract cheating) study found that 3% of university undergraduates self-report having obtained an assignment from a ‘paper mill’ (McCabe 2005). Although limited, these data suggest that contract cheating is a significant problem in higher education.

Given the difficulty of detecting custom-written assignments, it would appear logical that prevention is a more sensible approach to tackling the problem. One suggested preventative measure is to reduce the turnaround time for assignments –the time between the release of assignment criteria and the due date for the completed assignment. This would, in theory, give students less time to contact and contract a third party to prepare their work (Mahmood 2009; O’Malley and Roberts 2012).

To establish what an ideal turnaround time might be to deter contract cheating, we set out to calculate the current average turnaround time for contracted assignments. We analysed 132 publically-available assignment requests posted on two sites which have been misused for contract cheating purposes (Freelancer.com and Transtutors.com).

**Methods**

We located contracted assignments by browsing the aforementioned websites, which contain sections for ‘academic writing’. We also searched for the terms ‘University Essay’, ‘University-Level Essay’, '.ac.uk' and '.edu'. Some assignments were found by searching the
work history of freelancers with a track record of academic writing. No more than 5 assignments were included from any single writer.

To be included in our analysis, the contracted assignment had to:

- be clearly identified as a University-level academic assignment, but not a Masters or PhD dissertation (i.e. an essay of 500-5000 words)
- have been posted by a student seeking to cheat (rather than any other interpretation – see below for detail)
- require writing in its entirety (not editing or proofing)
- Only comprise a single, written assignment

To determine whether an assignment was likely to be used to cheat, we looked for indicators such as: instructions to freelancers stating that there was to be no plagiarism in the assignment, instructions about how to avoid plagiarism, statements that the employer did not have time to do the work.

For every assignment analysed from the Freelancer site, we recorded the following information (where possible): date, stated discipline, number of words, the requested turnaround time (in days), whether or not the request had been successfully completed within the turnaround time, the number of bidders offering to complete the job within the turnaround time, the actual (delivered) turnaround time and a link to the original posting. Once we had analysed postings made on Freelancer, we determined whether the main findings were replicated using postings made on a different site (www.transtutors.com) which has a more limited range of information available (see results).

Where no turnaround time was specified by the employer, this was recorded as 'Not Stated'. Where a deadline was stated but the turnaround time could not be determined from the posting itself (e.g. “I need this by Feb 17th” rather than “I need this in 3 days”), then the turnaround time was calculated from the posting date of the assignment. Where a range was stated (e.g. 3-4 days, 2500-3000 words), the upper limit of the range was used for analysis. Where assignment length was stated in pages, it was converted to a word count by multiplying the page number by 350.

We deliberately covered a wide timeframe (2009-2013) to ensure that our analysis was not skewed by any short term characteristics specific to summer 2013.

Results
The assignments covered a broad range of disciplines and countries of origin. They were classified into the following categories based upon the information available. Each figure in brackets represents the number of posted requests falling into that category; 'Anything' (1), Aquaculture (1), Art (2), Biology (1), Business (inc MBA) (17), Child Development (1), 'China' (1), Communication Studies (1), Computer Science (distinct from Information Technology) (4), Criminology (2), Economics (including Econometrics) (5), Education (8), English + English Literature (9), Engineering (2), Ethics (3), Film Studies (3), Finance (2), Health and Social Care (2), History (3), Human Resources (3), 'India' (1), Interpreting (1), International Relations (1), Information Technology (4), Italian (1), Journalism (1), Law (7), Linguistics (2), Magical Realism (1), Management (6), Marketing (inc Sales) (8), Music History (2), Nursing (1), 'Personal Development' (1), Philosophy (1), Politics (2), Project Management (4), Psychology (2), 'Quality' (1), Religious Studies (2), Research Methods (1), Science (1), Sociology (3), Statistics (1), Sustainability (1), 'Writing' (1), Unclassified/Unclassifiable (4).

We initially analysed 99 postings from the ‘Freelancer’ site. The mean turnaround time requested from this source was 4.45 days (SEM 0.57), with a mean stated turnaround time of completed jobs being 4.47 days (SEM 0.56). For every accepted bid there was a mean of 10 other freelancers offering to complete the work within the stated time. Simple linear regression analysis showed no relationship between the length of the requested assignment and the requested turnaround time ($R^2 = 0.076$) or between the length of the requested assignment and the numbers of freelancers offering to complete the work within the turnaround time ($R^2 = 0.029$).

To determine whether short turnaround times were a feature of another site which can be misused for contract cheating, we analysed 33 postings on the website ‘Transtutors’. Mean requested turnaround time was slightly but significantly longer than in the postings analysed from ‘Freelancer’ (mean = 7.7 days, $P = 0.0251$ by Mann Whitney test, $U = 446$). Metrics for number of bidders and job completion rates are not available on this site.

Of the 132 total assignments we analysed, 68% stated a desired turnaround time. The overall mean requested turnaround time was 5.14 days (SEM = 0.56, range 0-24 days). 24% of these requests were for a turnaround time of 1 day or less. 80% of requests appeared to have been completed within the stated time, although it is not possible to verify the accuracy of stated completion times, the number of stated bidders, or the quality of the work returned.

**Discussion**

Short turnaround times have been suggested as one means by which contract cheating can be prevented. Our analysis demonstrates that requested turnaround times for contract
cheating are already short, on average 4.5 days, and there appears to be a large capacity for shorter turnaround times to be achieved. In addition, assigning coursework with turnaround times of less than 4.5 days would severely compromise a valid assessment of many of the outcomes tested in long written assignments, such as developing a research question, searching for literature, analysing it and developing an argument. Therefore we conclude that short turnaround times are unlikely to effectively deter contract cheating, but would have a negative impact on the validity of assessments and the learning outcomes achieved.

The suggestion of short turnaround times to prevent contract cheating seems logical, but is perhaps based upon the premise that those engaging in the behaviour are sufficiently organised to arrange for contractors to complete the work with a long turnaround time. It seems reasonable to assume that time pressures, perhaps exacerbated by other factors such as personal problems or a history of poor academic performance, contribute to a decision by students to use contract cheating services, as they do for ‘traditional’ plagiarism (Walker and Townley 2012); a tight deadline may lead to contract cheating, rather than prevent it.

There is unlikely to be a single means by which contract cheating can be tackled. Other preventative suggestions have included a greater emphasis on exams and in-class assignments, together with a personalising of coursework and the aligning of content between exams and coursework (Mahmood 2009; O’Malley and Roberts 2012). Perhaps the single greatest need is for more high-profile research in this area, to educate educators about the existence and detail of the problem.

Conclusion

Short turnaround times for University assignments are highly unlikely to prevent contract cheating.

Notes on contributors

Melisa J. Wallace is a lecturer in Pharmacology at Cardiff University, whose research interests include education and academic integrity.

Philip M. Newton is an associate professor at Swansea Medical School, whose research interests include education and academic integrity.

References


