ALTA Forum

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Contract Cheating is / is not a Crime

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Contract Cheating in Higher Education

Contract cheating means

 a student's use *in an assessment* of material or assistance that is provided by another party in exchange for a consideration (of money),

where the explicit or implicit conditions of the assessment do not permit the use of this class of material or assistance



The principles

- Academic honesty is a **scholarly principle**
- Attribution of credit for contribution towards the reputation of an inventor or author in all fields of their public life is desirable for encouragement to invent and make public (and fame)
- Reliable certification of skills and knowledge in a degree award is essential for societal trust
- Commercial and professional practice and ethics
 - Acknowledging ownership of intellectual property for copyright permission, licensing payments
 - Transparency in subcontracting, liability, quality

The issues (0)

- The contractor is not the same as the student
- professional practice in creative disciplines
- scholarly practice in creative disciplines
- forensics: detection of evidence that implies cheating, inference of contracting
- reducing opportunities: plagiarism-proof tasks
- educating students: scaffolding, high and low stakes assessment



The issues (1)

- Should *providing* solutions for contract be illegal?
- Should offering to provide solutions for contract be illegal?



The issues (1a)

- Should *providing* solutions for contract be illegal?
- Should offering to provide solutions for contract be illegal?

The boundary test:

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 Should offering subcontract programming work for commercial practice be illegal or regulated?
 Be under stricter ethical guidelines or additional IP protection? Should stackoverflow?



The issues (3)

Should *using* a solution obtained by contract be

- illegal?
- severely disciplined?
- disciplined on a spectrum
 - poor academic practice or lack of attribution/ collaborating with other students / use of found material / use of solicited material
- What mitigation e.g. first offence, cultural background? Level of foreign language skill and
- 8 learning development?



THE HEADLINES (1)

 "survey of academics by Times Higher Education following publication of a new journal article* finds 'surprising levels of support' for the criminalising of student use of these services"

* Phil Newton (Swansea Medical School) and Rebecca Audrey (Deakin University) in *Higher Education* 14/2/19

- THE survey: 230 self-selected academics, online
 - 84% agreed essay mills should be illegal
 - 41% agreed students should be criminalised for use of services



THE HEADLINES (2)

 Tracey Bretag et al analysed a more nuanced survey of 14,000 Australian students' "outsourcing" behaviours: sharing and cheating

Contract cheating: a survey of Australian university students. **Studies in Higher Education** 2018

- 27.2% had provided a whole assignment to another (for any reason)
- 2.2% had obtained an assignment to submit
- 2.4% had obtained exam assistance



THE HEADLINES (3)

- Legislation in NZ penalties \$10,000
- Legislation proposal in Australia
 penalties \$120,000 / 2 years jail

"If you write another person's university essay that's cheating and you're ripping off other hard-working students and also undermining our world-class education system. We will make contract cheating a crime sending a very clear message that cheats do not prosper.."

Education Minister Dan Tehan 7/4/2019



Legislation NZ (1)

The services relating to an offence:

- a) completing an assignment or any other work that a student is required to complete...
- b) providing or arranging the provision of an assignment...
- c) providing or arranging the provision of answers for an examination...
- d) sitting an examination ... or providing another person to sit the exam in place of the student.



Legislation NZ (2)

It is an offence if a person:

- ...provides any service (as specified)... with the intention of giving a student an unfair advantage...
- ... advertises any [such] service ...
- ...without reasonable excuse, publishes [such] an advertisement...



Legislation Australia (1)

"The [Australian] Government is currently drafting legislation that would make it an offence to provide or advertise cheating services in higher education in Australia. TEQSA was provided with additional funding in the 2018-19 Budget to provide support ...through the development of education materials, intelligence gathering and, if necessary, support for prosecutions under the new national law.

Dept of Education and Training

Note: State laws are needed to cover some aspects



Legislation Australia (2)

- Universities Australia "welcomed" the bill.
- Group of Eight says "a strong legislative solution is warranted – and one that sends a strong message to those seeking to profit from students in this way."
- the National Union of Students, "supports government action" but not against students
 from Campus Morning Mail 9/4/19

New detection technology

- TurnItIn now claims AI techniques to detect stylistic differences in text, claims to identify possible different authorship between assignments submitted by one student
- Program code: language independent program authorship attribution is 90+% accurate over 600+ lines of code in a real code base (Google Code Jam data)
 - Caliskan-Islam USENIX Security 2015
 - Abuhamad et al. SIGSAC 2018



Analysis – conclusions - issues

- 1. Can the offence be detected?
- 2. Is creating a legal offence even one that is difficult to detect and prosecute
 - still useful as defining and labelling behaviour as very much unacceptable
 - still useful as a deterrent

Analysis – conclusions - issues

3. Should we avoid the problem in other ways? Are the assignments part of the problem?

"outsourcing behaviours – including serious forms of cheating – are more commonly influenced by dissatisfaction with the teaching and learning environment, and a perception that there are lots of opportunities to cheat in subjects. This places responsibility squarely with universities, and should prompt serious considerations of approaches to curriculum and assessment design."

"The types of assessment that students are least likely to ask an essay mill to complete for them are those that are least likely to be set by lecturers."

Bretag 2018



Legislation Australia (3)

DET seeks responses from stakeholders by 28 June 2019

I am working up a response for ACDICT to consider

Comments please to EO@acdict.edu.au

https://www.education.gov.au/tackling-contract-cheating



Specifics for ICT

- Simon et al found the difference between professional practice and university expectations is not explored or clarified.
- Expectations on use of material in assignment (programs) are not well spelled out in computing education
- what is common knowledge? Can I get my friend to help debug? To critically comment on my design? Can I use existing code fragments from stackoverflow? can I ask stackoverflow for code tips?



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Good practice in programming

Despite obvious solutions, no consensus or well established scholarly practice is taught to attribute external material used in assignments.

The professional skill of finding material is rarely taught (other than "research" in the "literature", where stackoverflow is not an acceptable source).

Are we a science? Or an engineering? Or a special kind of technology?

Do we teach the critical finding and use of our kinds of technical manuals and anecdotal material, and give credit for good reuse?

The issues (recap)

- Should a student's *use* of a solution obtained by contract be
 - illegal?
 - severely disciplined? Or on a spectrum?
 - are university discipline statutes and practices strong enough? Efficient? Effective? Flexible?
 - what mitigation should apply?
- Are detection techniques good enough to support creating criminal offences?
- Are the solutions in criminality, discipline, education, or modified assignment-setting and assessment?



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