Evidence-based approaches to contract cheating

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Outline of presentation

• 2015-2017 context
• Defining contract cheating
• The Assessment Design Myth
• Research questions and design
• Student Survey: Preliminary results
• Staff survey: Preliminary results
• What can be done? Using the evidence to respond to contract cheating
2015-2017 context

- MyMaster scandal (2015)
- Fake Diploma Mills (2015)
- Independent Commission Against Corruption (ICAC) investigation of corruption in higher education (2015)
  - TEQSA (Australia’s national HE regulator) request to Higher Education Providers for ‘assurance of academic integrity’
- More scandals: ghost students, fraudulent recruitment practices, low standards, exam impersonation (Documentary ‘Pens for Hire’)
- ‘Airtasker’ scandal (Feb 2017)
- These Australian ‘scandals’ were matched by similar ones across the globe.
Contract cheating

...where a student gets someone – a third party – to complete an assignment or an exam for them. This third party might be a friend, family member, fellow student or staff member who assists the student as a favour. It might be a pre-written assignment which has been obtained from an assignment ‘mill’. The third party may also be a paid service, advertised locally or online.

(As defined in staff survey)
## The assessment design myth

Assessment design is widely advocated as the solution, whereby we can ‘design out’ opportunities to cheat.

### Invigilated exams
- Paid impersonation
- Outsourcing of whole degrees
- Exam focus leads to other cheating problems

### Decreased turnaround times
- 24% of procurement ads on ‘Freelancer’ & ‘Transtutors’ were for a turnaround time of one day or less (Wallace & Newton, 2014)

### Personalised, sequential and original assessments
- Employment portfolios, reflective journals, presentations, research proposals, and even complete doctoral dissertations can all be bought like any other commodity
Research questions

1. How prevalent is contract cheating in Australian higher education?
2. What are student and staff attitudes towards and experiences with contract cheating?
3. What are the individual, contextual and institutional factors that are correlated with contract cheating?
4. What kinds of assessments are associated with contract cheating?
Research design

1. Parallel staff and student surveys
   ◦ 8 Universities
   ◦ 4 Non-University Higher Education Providers (NUHEPs)

2. Large dataset of procurement requests posted to multiple cheat sites
   ◦ Shows the types of assessment commonly contracted out to third parties

3. Data from two universities’ longitudinal academic integrity databases
   ◦ Shows the assessment items in which contract cheating has been detected
Seven outsourcing behaviours

- Buying, selling or trading notes
- Providing a completed assignment (for any reason)
- Obtaining a completed assignment (to submit as one’s own)
- Providing exam assistance
- Receiving exam assistance
- Taking an exam for another
- Arranging for another to take one’s exam

Sharing behaviours

Cheating behaviours
Student survey

A PRELIMINARY ANALYSIS OF KEY FINDINGS
Respondents

- Eight universities from six states - NSW, VIC, QLD, TAS, SA, WA
- N = 14,086
  - 57% Female; 41% Male
  - 29% 17-20 years old; 37% 21-25; 12% 26-30%; 12% over 30
  - 69% Undergraduates; 21% Postgraduate Coursework; 9% Postgraduate Research
  - 85% Domestic; 15% International
  - 65% Internal students; 26% Blended mode; 9.3% External (online only)
  - 79% English speaking; 21% Language Other than English (LOTE)
  - 50% Go8; 50% non-Go8
## Prevalence of outsourcing behaviours

<table>
<thead>
<tr>
<th>Classification</th>
<th>Behaviour</th>
<th>% engaged</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sharing</strong></td>
<td>Bought, sold or traded notes</td>
<td>15.3%</td>
</tr>
<tr>
<td></td>
<td>Provided assignment (for any reason)</td>
<td>27.2%</td>
</tr>
<tr>
<td><strong>Cheating</strong></td>
<td>Obtained assignment (to submit as own work)</td>
<td>2.2%</td>
</tr>
<tr>
<td></td>
<td>Provided exam assistance</td>
<td>3.1%</td>
</tr>
<tr>
<td></td>
<td>Received exam assistance</td>
<td>2.4%</td>
</tr>
<tr>
<td></td>
<td>Taken exam for other</td>
<td>0.5%</td>
</tr>
<tr>
<td></td>
<td>Other taken exam</td>
<td>0.2%</td>
</tr>
</tbody>
</table>
6% of respondents (n= 814 students) reported engaging in one or more of the 5 contract cheating behaviours

- Analysed as a subset and compared against ‘non-cheating’ students
- Students who reported ‘sharing’ behaviours not included
## Nature of cheating behaviours

<table>
<thead>
<tr>
<th>Survey items</th>
<th>Obtained assignment (to submit)</th>
<th>Provided exam assistance</th>
<th>Received exam assistance</th>
<th>Taken exam for other</th>
<th>Other taken exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Cheating students engaged</td>
<td>37%</td>
<td>53.2%</td>
<td>41%</td>
<td>7.9%</td>
<td>4.2%</td>
</tr>
<tr>
<td>% who submitted as own work</td>
<td>68.5%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provider/receiver</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student or former student</td>
<td>60.2%</td>
<td>66.7%</td>
<td>78.9%</td>
<td>40%</td>
<td>50%</td>
</tr>
<tr>
<td>Friend or family member</td>
<td>51.2%</td>
<td>69.6%</td>
<td>52.8%</td>
<td>71.6%</td>
<td>56.3%</td>
</tr>
<tr>
<td>Professional service</td>
<td>10.4%</td>
<td>1.5%</td>
<td>5.3%</td>
<td>6.7%</td>
<td>18.8%</td>
</tr>
<tr>
<td>Partner or girl/boy friend</td>
<td>9%</td>
<td>6.1%</td>
<td>7.5%</td>
<td>16.7%</td>
<td>15.6%</td>
</tr>
<tr>
<td>Money exchanged</td>
<td>Yes</td>
<td>13.3%</td>
<td>3.4%</td>
<td>2.8%</td>
<td>16.7%</td>
</tr>
</tbody>
</table>
## Sharing behaviours

<table>
<thead>
<tr>
<th>Engaged in behaviour</th>
<th>Bought, sold or traded notes</th>
<th>Provided assignment (for any reason)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cheating group</td>
<td>Non-cheating</td>
</tr>
<tr>
<td>Bought, sold or traded notes</td>
<td>28.1%</td>
<td>14.5%</td>
</tr>
<tr>
<td>Provided assignment (for any reason)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Provider/receiver</th>
<th>Bought, sold or traded notes</th>
<th>Provided assignment (for any reason)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Another/former student</td>
<td>74.2%</td>
<td>73%</td>
</tr>
<tr>
<td>Friend/family member</td>
<td>46.3%</td>
<td>51.6%</td>
</tr>
<tr>
<td>File-sharing website</td>
<td>31%</td>
<td>21.3%</td>
</tr>
</tbody>
</table>
## The Cheating Group

<table>
<thead>
<tr>
<th>Demographic</th>
<th>All respondents (n = 14,086)</th>
<th>Cheating subset (n = 814)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>57.4%</td>
<td>44.0%</td>
</tr>
<tr>
<td>Male</td>
<td>41.1%</td>
<td>54.2%</td>
</tr>
<tr>
<td><strong>Language spoken at home</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>78.8%</td>
<td>59.8%</td>
</tr>
<tr>
<td>Language other than English</td>
<td>21.2%</td>
<td>40.2%</td>
</tr>
<tr>
<td><strong>Domicile</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestic</td>
<td>84.7%</td>
<td>67.0%</td>
</tr>
<tr>
<td>International</td>
<td>15.3%</td>
<td>33.0%</td>
</tr>
<tr>
<td><strong>Discipline</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineering</td>
<td>13.1%</td>
<td>24.6%</td>
</tr>
<tr>
<td><strong>Type of institution</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group of 8 (Go8) university</td>
<td>50.0%</td>
<td>55.2%</td>
</tr>
<tr>
<td>Non-Go8 university</td>
<td>50.0%</td>
<td>44.8%</td>
</tr>
</tbody>
</table>
Attitudes towards outsourcing behaviours

- Compared across Domestic/International respondents and English/LOTE student
- No significant difference
- However, there was a difference between Cheating and Non-cheating groups
Cheating group vs Non-Cheating group: Attitudes towards sharing and cheating behaviours

<table>
<thead>
<tr>
<th>% of students who Strongly Agreed or Agreed behaviour is wrong</th>
<th>Bought, sold or traded notes</th>
<th>Provided assignment (for any reason)</th>
<th>Obtained assignment (to submit)</th>
<th>Provided exam assistance</th>
<th>Received exam assistance</th>
<th>Taken exam for other</th>
<th>Other taken exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cheaters</td>
<td>48.3</td>
<td>85.0</td>
<td>91.7</td>
<td>70.6</td>
<td>76.3</td>
<td>93.7</td>
<td>94.6</td>
</tr>
<tr>
<td>Non-Cheaters</td>
<td>54.1</td>
<td>96.3</td>
<td>98.0</td>
<td>98.3</td>
<td>94.8</td>
<td>98.0</td>
<td>98.3</td>
</tr>
</tbody>
</table>
Perceptions of T&L environment

1. I have **opportunities to approach** my lecturers and tutors for assistance
2. My lecturers and tutors ensure I **understand what is required in assignments**
3. There are lots of **opportunities to cheat** in my subjects
4. My lecturers and tutors have **explained my institution’s academic integrity policy**, and the consequences for breaching it
5. My lecturers and tutors spend class time **teaching me how to reference**
6. My lecturers and tutors spend class time **talking about ‘contract cheating’**
7. My lecturers and tutors spend class time teaching me **how to engage in scholarship** in my discipline
8. My lecturers and tutors **consistently monitor and penalise** academic integrity breaches in line with my institution’s policy
9. My lecturers and tutors are **consistent with each other** in grading
10. I receive **sufficient feedback** to ensure that I learn from the work I do
Perceptions of T&L environment

• Cheating students reported the *lowest levels of agreement* when compared to Non-Cheating students on three key items:
  • My lecturers and tutors ensure that I understand what is required in assignments
  • I receive sufficient feedback to ensure that I learn from the work I do
  • I have opportunities to approach my lecturers and tutors for assistance when needed

This has been labelled the ‘**personalised teaching and learning relationship**’, because of its focus on individualised, learning-related interactions between students and educators.
Assessment design

Students were asked to imagine being required to submit a range of assessment types and, on a five point Likert scale:

rate the likelihood that a student “would consider getting someone else to complete this kind of assignment for them”.

Staff survey

A PRELIMINARY ANALYSIS OF KEY FINDINGS
Respondents

N = 1,147

- 59% female, 39% male
- 36% born overseas, 90% speak English at home
- Primary work location: 83% metropolitan campus, 9% rural/regional, 8% home
- Employment type: 49% continuing, 30% casual/sessional, 21% Fixed-term contract
- Years employed in HE: 33.7% (1-5), 23.6% (6-10), 16.1% (11-15)
- Employment level:
  - Level A 12%, Level B 22%, Level C 19%, Level D 8%, Level E 6%
  - Non-academic 16%, Not sure 17.5%
Percentage of respondents

- Health Sciences: 20%
- Education: 15%
- Business and Commerce: 14%
- Science: 10%
- Arts/Humanities: 10%
- Other: 8%
- Engineering: 6%
- Law: 6%
- Information Technology: 4%
- Mathematics: 3%
- Earth & Environmental Sciences: 3%
- Creative Arts/Performance: 2%
- Architecture and Buildings: 2%
- Media/Communication Studies: 1%
Outsourced assignments

• 68% of staff have suspected assignments of being outsourced

• Of those, 40% have suspected this more than 5 times

• Educator’s knowledge of student the most common signal
  • Knowledge of academic ability 71%, Knowledge of language ability 62%
  • High text match via software 49%

• Only 56% of staff refer such cases to AI decision maker
  • Approximately 8% of staff ignore them
  • The remaining 36% handle it themselves, from giving warnings through to giving zero
Outsourced assignments

- For those who do not refer such cases to AI decision makers, why?
  - 32% Impossible to prove
  - 14% Too time consuming
  - 12% Not supported by senior management to pursue these matters

- For those who do refer cases
  - 33% are not typically informed about what happens
  - 35% report their cases are *substantiated 90-100% of the time*

- This counters perceptions that contract cheating is impossible to prove...
- BUT staff must be informed of this to increase referral rates
Outsourced assignments

• What is the *typical* penalty/outcome? [staff could select a combination of items]
  • 30% Warning/counselling
  • 27% Zero for assignment
  • 21% Reduced mark for assignment
  • 3% Suspension
  • 2% Expulsion

• Penalties seem far more lenient than those recommended in the literature
Exam assistance

- Only **7%** of staff said exam assistance had occurred in their courses
  - Of those, most (61%) had seen it 1-2 times
  - However, 9% had seen it **more than 10 times**

- **23%** were not informed of the outcome
  - 36% Zero for the exam
  - **46% Warning/counselling**
  - 11% Resit the exam
  - 4% Expulsion
Exam impersonation

- 5% of staff said exam impersonation had occurred in their courses
  - Of those, most (77%) had seen it 1-2 times
  - However, 13% had seen it more than 10 times

- 35% were not informed of the outcome
  - 23% Zero for the exam
  - 23% Warning/counselling
  - 16% Zero for the subject
  - 16% Suspension
  - 12% Expulsion
Attitudes about ‘wrongness’

Contract cheating and assessment design

Percentage of respondents who strongly agreed/agreed behaviour was wrong

- Bought, sold or traded notes
- Provided assignment (for any reason)
- Obtained assignment (to submit)
- Provided exam assistance
- Received exam assistance
- Taken exam for other
- Other taken exam

Cheaters
Non-Cheaters
Staff
Perceived prevalence

Estimated percentage of students engaged in behaviours

- Cheaters
- Non-Cheaters
- Staff

Percentage of respondents
Level of concern

Percentage of respondents who Agree/Strongly Agree

Level of concern

Cheaters
Non-Cheaters
Staff

Not at all  Slightly  Moderately  Very  Extremely

contract cheating and assessment design
### Teaching and learning practice

1. I have **opportunities to approach** my lecturers and tutors for assistance
2. My lecturers and tutors ensure I **understand what is required in assignments**
3. There are lots of **opportunities to cheat** in my subjects
4. My lecturers and tutors have **explained my institution’s academic integrity policy**, and the consequences for breaching it
5. My lecturers and tutors spend class time **teaching me how to reference**
6. My lecturers and tutors spend class time **talking about ‘contract cheating’**
7. My lecturers and tutors spend class time teaching me **how to engage in scholarship** in my discipline
8. My lecturers and tutors **consistently monitor and penalise** academic integrity breaches in line with my institution’s policy
9. My lecturers and tutors are **consistent with each other** in grading
10. I receive **sufficient feedback** to ensure that I learn from the work I do
Engagement in third party cheating

In their role as *staff*, had respondents ever provided materials to a student that allowed them to gain an unfair advantage?

- Only 0.5% (n=4/783) said yes

As *students*, had respondents ever engaged in behaviour that would be classified as third-party cheating?

- **10%** said yes
Evidence-based approaches to contract cheating

What we now know:

• 6%-10% of students engage in contract cheating in one form or another
• International, LOTE, male and Engineering students are over-represented in the cheating group
• Use of commercial providers is relatively rare
• There are NO assessments which will prevent contract cheating, but students report that some types are less likely to be outsourced.
• Cheating students don’t cheat because they think it’s less ‘wrong’. Rather, they are struggling with academic/linguistic requirements and don’t feel supported by the T&L environment.
• Staff and students reported vastly different levels of concern about contract cheating.
• Staff and students reported inconsistent & lenient outcomes when contract cheating is detected.
Evidence-based approaches to contract cheating

- Assessment design is not the answer, but it matters, nonetheless!
- Although any assessment can be outsourced, this doesn’t absolve teachers from using original, innovative, engaging assessments which aim to ensure the identity of the student.
Evidence-based approaches to contract cheating

Students want and need a personalised T&L relationship:
- The opportunity to approach teaching staff for assistance
- Clarification about assessment requirements
- Individualised and meaningful feedback
Evidence-based approaches to contract cheating

Despite our best efforts, some students will choose to outsource their work. We therefore need:

• Support for staff to ensure consistent detection
• Well documented and consistent processes for reporting of cheating
• Training for teachers & decision-makers to substantiate cases of contract cheating
• Communication between all stakeholders (teachers, decision-makers, students) so that outcomes for contract cheating are known
Conclusion

- Contract cheating is a symptom of an education system under stress
- Commercial providers inundate vulnerable students with offers of ‘help’
- Our preliminary findings have identified these vulnerable students
- More analysis of the data is needed to assist with practical solutions
- Three key areas have emerged as potential places to start:
  - Use of ‘less likely to be outsourced’ assessment tasks
  - Fostering ‘personalised teaching and learning relationships’
  - Supporting a process of detection and reporting
    - For this to happen, staff need much more training, professional development and assistance.
Acknowledgements

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