The impact of practical training on student understanding of plagiarism

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Abstract

In order to develop an understading of plagiarism and how best to avoid it, a workshop was conducted with masters' students. They took part in a 4 hour interactive session that covered types of plagiarism, appropriate acknowledgement of sources, paraphrasing and contract cheating. They also completed a literature review afterwards for which they received two rounds of feedback on plagiarism issues. Students completed a survey assessing their understanding of plagiarism pre and post the workshop. A paired samples t test showed a significant improvement in student understanding of plagiarism as a result of the intervention. It is planned to roll out the initiative to other student groups in the coming academic year.

Keywords: *Plagiarism; academic integrity; student understanding; plagiarism prevention.*

1. Introduction

During the height of the Covid-19 pandemic, educational institutions around the world pivoted to online teaching and assessment without warning or preparation. Despite this, most universities managed to quickly adapt, albeit in many cases in an ad hoc manner. In the University of Galway, the institution in which this study is based, teaching staff moved to a combination of live and recorded lectures via Zoom or similar. The experience and support of the university's Centre for Excellence in Learning and Teaching meant the many queries of the teaching staff regarding technology and teaching approaches were quickly answered, resulting in a different, but largly educationally successful, experience for staff and students.

A more difficult issue to resolve was that of assessment. Unlike physical exams, online evaluation and submitted assignments provide significant opportunities for students to breach academic integrity (Amzalag *et al.*, 2022). Students can easily access the internet, consult with classmates and quickly copy material from a variety of sources (Mbhiza, 2021; Peytcheva-Forsyth *et al*., 2018; Sarwar *et al*., 2018). By necessity, written assignments and timed online exams took the place of formal written exams. However, in common with many other institutions (Meccawy *et al*., 2021; Mokdad & Aljunaidi, 2020), this did result in increased reports of plagiarism within the School of Business in which this study took place.

With the relaxation of Covid-19 restrictions, in-class teaching and physical exams returned. However, as is happening elsewhere (Jena, 2020; Mbhiza, 2021; Pettit *et al*., 2021), a discussion on retaining the benefits of alternative assessment methods, whilst minimising academic integrity issues, is ongoing. In person exams, the traditional approach to assessing student knowledge, have the benefit of being administered in a secure environment where students do not have access to materials other than those specifically allowed. However, this approach can result in passive, rather than active, learning on the part of the student (Altay, 2013) with students simply memorizing the material for the exam (Flores *et al.,* 2014), and frequently forgetting what they have learned shortly afterwards (Rawson *et al*., 2013). In constrast, approaches such as authentic assessment which increase realism are shown to promote active learning by providing cognitive challenge and requiring judgement and analysis, this improving learning outcomes for students (Hogan, 2020; Villarroel et al., 2020).

Based on academic integrity issues with students over the years, and in common with findings elsewhere (Aasheim *et al*., 2012; Ali *et al*., 2012; Dawson & Overfield, 2015; Marshall & Garry, 2005), it is clear that many students have a poor understanding of the ways in which a student submission can be considered to be plagiarized. Thus, it was decided to take a proactive approach to educating the students with the aim of reducing plagiarism incidents and facilitating assessment integrity outside the exam hall.

2. What is Plagiarism?

According to Cambridge Dictionary plagiarism is "the process or practice of using another person's ideas or work and pretending that it is your own". On initial reading, it would appear to be a relatively simple, clear-cut concept. Howeves, it is not as clearcut as it may initially appear (Aasheim *et al*., 2012; Ali *et al*., 2012; Dawson & Overfield, 2015; Marshall & Garry, 2005). Students tend to have a clear understanding that cutting and pasting without acknowledgement or purchasing an assignment, constitute plagiarism (Ali *et al*., 2012; Marshall & Garry, 2005). However, actions such as lack of paraphrasing or citing sources they have not read, are less likely to be considered to be plagiarism by students (Marshall & Garry, 2005).

2.1. Education on Plagiarism

There is much academic discussion on how best to teach students about academic integrity. Löfström *et al.* (2014) stress the importance of developing an understanding of the concepts, rather than just informing them of the rules. Bertram Gallant (2017) discusses the benefits of education rather than relying on sanctions. Other approaches include that of Brown and Janssen (2017) who developed a workshop which facilated students exploring the concepts relating to plagiarism and the development of a joint integrity code. They noted a decrease in plagiarism cases consequent to the workshop. Fenster (2016) reported positive results after their students took part in a one hour workshop focused on paraphrasing. However, not all education is equal. Holt *et al.* (2014) found no improvement in students' knowledge following an online training course. They did, however, find a significant improvement in those who completed a relatively high stakes homework plagiarism assignment.

3. Design of the Training

Given the documented success of various workshops on plagiarism knowledge, it was decided to develop a workshop that covered academic integrity from a number of perspectives. The workshop consisted of the following elements:

> **Student discussion on their understanding of plagiarism**. A 'Think-Discuss-Share' approach was used where students spent some time making note of what they believed was meant by plagiarism. The then discussed their thoughts in groups of 3. Finally, they shared the group consensus. Students were also presented with a series of scenarios, ranging from clear and obvious plagiarism to no plagiarism (Carroll, 2022, p. 52) and asked to identify where the line is for plagiarism.

> **Discussion on types of plagiarism**. The many ways in which students can plagiarise were presented and discussed in groups.

The difference between collusion and collaboration. As groupwork is so prevalent, the differences between collaboration and collusion were discussed. Students examined various scenarios in small groups and were tasked with identifying the line between collaboration and collusion (Carroll, 2022, p. 19).

How and why we credit sources. The reasons we credit our sources were discussedas were the rules for doing so.

Paraphrasing. Poor paraphrasing is a major cause of student plagiarism. Strategies for effective parphrasing were discussed and students practiced paraphrasing with feedback.

Contract cheating. The final section of the workshop covered contract cheating and involved the students in discussions on various scenarios relating to contract cheating.

Following on from the workshop, the students wrote a 2-page literature review on a topic relevant to their major project. They received feedback on any plagiarism issues, such as poor paraphrasing. They corrected and re-submitted the document and received futher feedback.

4. Methodology

Students completed a survey (see Table 1) prior to participating in the plagiarism workshop. This survey, adapted from those of Marshall and Garry (2005), Clarke *et al.* (2022) and Kokkinaki *et al.* (2015), was created to gauge student understanding of what constitutes plagiarism. They were asked how capable, on a scale of 1-5, they believe themselves to be of avoiding plagiarism in assignments. They were then asked to examine a number of scenarios and answer yes, no or don't know as to whether they believed them to be plagiarism. After completing the workshop and the literature review practice, the students completed the survey a second time to see had their understanding improved. A total of 60 students took part in the workshop, with 32 completing both the pre and post workshop surveys. They were all students on a Masters in Information Systems Management. Of the 32 students, 14 were female and 18 were male. Of those, 5 had English as a first language, with the majority of the remaining students being from India (17) or China (9).

5. Results and Discussion

Students were initially asked to indicate their confidence levels in their ability to avoid plagiarism on a scale of 1-5, with 1 being very unconfident and 5 being very confident. Students were confident going in, with a mean value of 4.09. Post workshop, that confidence increased to 4.16. However, there was no significant difference in the values. That confidence

may have been misplaced in some cases as the number of correct identifications of plagiarism pre-workshop had a mean of 11.06 correct and ranged from 1 to 14 correct.

The individual who only got 1 correct describing themselves as 'neither confident non unconfident'. That individual rated themselves as 'fairly confident' after the workshop and got all 16 correct in the post-workshop survey. For that individual at least, the workshop appears to have greatly improved their knowledge of what constitutes plagiarism.

The descriptions of potential plagiarism can be seen in Table 1. The mean pre-workshop value was 11.06 correct and improved to a mean of 13.28 correct post workshop. Paired samples t-test was conducted. The results indicated a significant difference in the number of correctly identified examples of plagiarism pre (M=11.06, SD = 2.663) and post (M=13.28, SD=1.631) workshop; t(31) = -3.738, p <=0.001. As can be seen in Table 1, the number correctly identifying plagiarism increased post-workshop for each scenario presented.

The lowest number of correct responses both pre and post was Q.3. This suggests, and is supported by most cases of plagiarism encountered with the School of Business, many students struggle to understand what paraphrasing means. While they did get some practice, along with examples and discussion, the time devoted to it was insufficient. They also got feedback on their paraphrasing in the submitted literature review. In future workshops, more focused time will be spent on paraphrasing. There is, however, also the possibility that, given the number of students whose first language is not English, the subtleties of the difference between "changing several words" and paraphrasing may have been missed.

Quite a number of students believed there was plagiarism in Q2, Q5 and Q6. It is not clear why this is the case but the phrases "copying", "same theme as an existing one" and "someone else's work" may have triggered a gut feeling that it was plagiarism. The numbers recognizing that these are not plagiarism post-workshop increased significantly.

Ultimately, the workshop seems to have improved students awareness of what constitutes plagiarism. They had an opportunity to practice academic writing and received feedback on errors in paraphrasing and appropriate acknowledgement of sources. Verbal feedback from the students was positive, with many stating the workshop and subsequent literature review helped to clarify their thoughts on how best to refer to other people's work in their writing.

Table 1. Is this plagiarism?

		Correct	
		Pre	Post
1.	Translating information from a source in a foreign language without appropriate acknowledgement of the source (Y)	25	30
2.	Copying exact words from another source but placing them within quotation marks and with appropriate acknowledgement of the source (N)	18	28
3.	Taking a section of text from another source, changing several words in it and acknowledging the source (Y)	9	10
4.	Rewriting a piece of text from another source in your own words and only acknowledging the source in a reference list at the end of your paper (i.e. no in-text citation) (Y)	13	25
5.	Creating a new piece of work on the same theme as an existing one but in a new context and without copying the existing one. (N)	22	27
6.	Rewriting a short section from someone else's work in your own words and including appropriate acknowledgement of the source (N)	17	25
7.	Copying short sentences (less than 50 words) from another source without appropriate acknowledgement of the source (Y)	29	32
8.	Paying someone to write part or all of a piece of work that you then submit as your own work (Y)	31	32
9.	Working with other students on an individual assignment and submitting it as your own work (Y)	27	29
10.	Using another piece of work to identify useful secondary sources that you cite in your own work, but without reading the secondary sources (Y)	18	20
11.	Copying exact words from another source with appropriate acknowledgement of the source (Y)	15	19
12.	Resubmitting an assignment (or part of an assignment) previously submitted in one module for assessment in another module (Y)	24	30
13.	Copying exact words from another source without appropriate acknowledgement of the source (Y)	30	31
14.	Copying a web site and putting your own words and name into the content part of the pages. (Y)	27	27
15.	Copying the ideas from another piece of work and writing about them in your own words, without appropriate acknowledgement of the source (Y)	26	30
16.	Using pictures from the internet without appropriate acknowledgement of the source (Y)	23	30

6. Conclusion

The students on a masters' course participated in a half-day workshop on plagiarism. The workshop allowed practical opportunites to discuss the nuances of plagiarism and to practice the skills necessary to avoid it. This intervention improved student understanding of plagiarism. While it can be deemed a success in that regard, the ultimate test will be its impact on the number of plagiarism cases this academic year. They are being tracked and will be compared with previous years. To date, there have been 3 cases, all of which involved the use of parphrasing software by students whose first language is not English. While this was discussed during the workshop as being plagiarism, perhaps there was insufficient focus on the issue. This will be addressed in future iterations.

Overall, the students were extremely positive about the experience and actively participated. Perhaps the best feedback relating to the workshop was being approached by a student in a different programme asking why they did not also get this opportunity. If plagiarism numbers are reduced, the workshop will be rolled out to other programmes on an ongoing basis.

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