"This is not plagiarism however it is a bad use of power phrasing": Assessment of home and international student (mis)understandings of citation practice.

Elaine Tan* *Business School, Newcastle University, Newcastle upon Tyne, UK*
Sarah Carnegie *Business School, Newcastle University, Newcastle upon Tyne, UK*

Elaine.tan@newcastle.ac.uk
Sarah.carnegie@newcastle.ac.uk

Newcastle University Business School, Newcastle University, 5 Barrack Rd, Newcastle upon Tyne NE1 4SE

Abstract
This study documents the development of an assessment (a multiple-choice test with free text rationale) built into an academic skills module over a 2 year period. Initially introduced as a credit bearing assessment to promote student engagement, disappointing results in the first year prompted a further intervention in year 2 with an additional lecture and a series of online resources provided. The results of the assessment from both years were examined; firstly to determine the success of the intervention, and secondly the free text rationales in an attempt identify aspects of academic practice that proved difficult for students. With a diverse cohort, the opportunity to examine distinctions between home and international students was also explored. The results indicated that upon the introduction of the intervention the pass rate for the assessment increased from 56% to 80%, however a qualitative analysis of the free text student rationales highlighted persistent underlying problems.
Keywords: Academic Writing, Plagiarism, Intervention

Introduction

The academic skills module in which this study took place was part of a Business Management undergraduate programme, at a Russel Group university. The cohort in both years of the study were diverse with just under 20% international students. The study involved a total of 264 students over the two years with 133 students enrolled in the first year and 131 in the second year of the study.

In the years prior to this study, teaching staff had anecdotally reported increasingly poor academic practice by students, particularly amongst international students. To counter this the decision was made to encourage engagement with the existing academic skills module available in first year of study. At first a credit bearing assessment (an online quiz) was simply introduced to promote engagement as historically the lectures provided by staff on academic skills had resulted in passive engagement as students overestimated their existing ability in academic writing (Newton, 2016).

In the assessment students were presented with a range of example texts which ranged from blatant plagiarism (Hu & Lei, 2015), to more nuanced examples focussing on issues of paraphrasing. Students were asked to examine each example and classify them from the options: 'Plagiarised', 'Not plagiarised', or 'Not plagiarised but problematic' and to provide a free text rational for their choice. The assessment in year one of the study was completed by nearly all students, however the poor results [see table 1] indicated persistent difficulties and misunderstandings that required further attention.

A review of the existing resources for students was therefore undertaken and additional support developed. Two online learning resources were created and made available through the VLE. One, a video created by library services explaining examples of academic misconduct (such as copying and pasting uncited text), and two, an interactive referencing tutorial that allowed student to work through a number of exercises. In line with advice that a 'holistic' approach (Childers & Bruton, 2016) and importance of supporting all students 'learning to learn' (Wingate, 2007) as an embedded element of their studies (Wingate et al., 2011) an additional lecture given by academic writing specialists was also introduced. Such a collaborative approach has proven to be particularly effective (Wilkes et al., 2015) and valuable to students (Gopee & Deane, 2013) when developing their academic writing particularly within the first year of study (Beckman & Rayner, 2011; Price et al., 2011). This additional lecture included pre-lecture reading and an in-class formative assessment. Students were then asked to complete the online assessment and the results of both years were compared.

Research questions
The results of the assessment from both years were analysed and the following research questions were posed examining the data available:

1. How able are students to identify issues of plagiarism, when presented with examples ranging from 'blatant' and 'subtle'?
2. Can any comparisons be drawn between home and international students understanding of citation practice as an educational activity?
3. What can the student qualitative answers in assessment reveal about the aspects of citation practice that they find difficult or problematic?

Academic integrity as a learning activity
Plagiarism itself within higher education, has become somewhat of a combative issue which some describe as technological 'arms race' (Awdry & Sarre, 2013). As digital platforms such as Turnitin are increasingly used to ensure originality, ever more diverse ways of evading detection open to students such as essay mills or ghost writers (Levine & Pazdernik, 2018; Selwyn, 2008). Much of the existing research on plagiarism focusses on the ethical or moral dimensions but ultimately is concerned with the disintegration of trust between students and staff (Carless, 2009). The reasons as to why students resort to plagiarism are wide and varied; from lack of self-efficacy (Ogilvie & Stewart, 2010), lower levels of academic ability (Ba et al., 2017) to the high cost and therefore high stakes nature of university education where students are under pressure to perform (Lines, 2015). Such are the costs of higher education that Devlin and Gray (2007) discovered that for some students it trivialises the amount necessary to purchase assessments and promotes disregard for the intellectual nature of assessment (Elias, 2009).

The reasons why students plagiarise have not always been found to be concerned with moral, financial, or attainment questions, but instead located within more practical aspects of learning and teaching. Devlin and Gray (2007, p. 187) when examining the reasons why students plagiarise suggest that among the main reasons are; 'poor understanding of plagiarism… poor academic skills… [and] teaching/learning issues'. Shaw and Pecorari (2018, p. 7) put forward an important distinction that plagiarism is discrete from academic misconduct; one 'better understood as mistakes' and one a 'deceptive act'. They caution that 'careless' writing should not be grouped in the same category as misconduct as the motivating factors for such writing are unrelated. Therefore in this study we put to one side the moral

discussions surrounding plagiarism and instead examine academic writing as an education issue (Adam et al., 2017).

International students and approaches to plagiarism
There is broad agreement that incidences of plagiarism are more frequent among international students (Ashworth et al., 2003; Hofer et al., 2012) and has been the subject of much research. Some have focussed on the cultural dimensions suggesting that for some students to not use what has been written by others is regarded as unusual practice and simply the cultural norm (Young, 2013). As such students have a 'non-condemnatory' (Hu & Lei, 2012) view of plagiarism and a 'lack of clarity about the meaning and practices' (Bretag et al., 2014, p. 1167) of academic writing. Duff et al. (2006, p.675) describe this 'deficit' to be most apparent when work is judged according to what they describe as 'a Western benchmark'. Resorting to plagiarism has been suggested as a response to difficulties presented by studying in a second language (Pecorari & Petrić, 2014) and reflecting a lack of self-confidence in writing in English (Newton et al., 2014). Despite these suggestions, however there has been limited research that has looked at the contrast between home and international students understanding of academic writing as an educational rather than cultural issue.
4

Academic writing education: Declarative and procedural knowledge
When considering academic writing, it can be viewed as have two aspects of knowledge; Declarative and Procedural (Pecorari, 2003; Pecorari & Petrić, 2014). To demonstrate; if asked to identify plagiarism in example texts not only must students '*know that*' (declarative) there are issues with the text but further '*know how*' (procedural) they should be corrected. For successful academic writing, both are required but the second necessitates a deeper level of understanding. Previous studies such as Wette (2010) have attempted to support students development in both areas using a programme of increased support followed by an initial assessment. We have adopted a similar approach in this study as an attempt to promote our own student understanding but have also included a qualitative analysis of the rationales provided by students to further understand difficulties and divergences.

Methodology
The data from the online assessment across both year one (n= 133) and year two (n=131) was collated to allow both qualitative and quantitative analysis. Firstly, the overall results from both years were examined to determine the initial success of the intervention in terms of immediate influence on student scores. Next, the free text of the lowest scoring question answers underwent qualitative content analysis to gain a more in-depth understanding of the misunderstandings and difficulties encountered. In an attempt to ensure rigor, the texts were examined by both researchers, firstly independently then collaboratively to verify and reconcile individual interpretations of the text. Finally, the demographic data was used to examine and compare the data of both home and international students.

Results
In the first year students did not perform well. Many students were unable to identify plagiarism in the given examples of text and fewer still to provide a correct explanation for their response. The pass rate in year one was 56% of the cohort (n=133), and the average score 39% (by institutional regulations constituting a fail). Upon introduction of the additional support and

resources in year two, there was an overall improvement in the attainment of students. The same test completed by students in year 2 (n=131) alongside the additional learning materials resulted in an improved pass rate of 80% with an average 10 point improvement in performance.

To answer our first research question, as a result of the intervention students were indeed more able to identify incidences of plagiarism and demonstrated a greater level of declarative knowledge. The additional support provided to students appears to have been effective in improving attainment. Whilst there is a possibility that the reuse of questions could have impacted upon this result, students did not have access to previous examples or feedback from the previous year.

Insert table 1 about here

Differences in attainment: Home versus international students
The results from our second research question indicated that in contrast to the existing literature (Newton et al., 2014) non-native English speakers out-performed domestic students in the assessment in both years of the study. This is a surprising result given previous studies indicate that international students are more likely to have incidences of academic misconduct occurring in assessments (Bamford & Sergiou, 2005; Bretag et al., 2014; Shaw et al., 2018; Walker, 2010). As to why this result may be the case, we can speculate that perhaps students in this group are initially more engaged and perhaps lacking in confidence in writing in English, do not overestimate their existing academic writing abilities (Newton, 2016). Further research is required to understand if our findings are replicated elsewhere and why this may be the case.

The implementation of the invention however returned another interesting result. From an initial examination of the results in year two indicated a negative impact upon the attainment of international students with a significant decrease in average attainment of -6.3%. Whilst one limitation of this research is that it has a small sample size and two separate cohorts, such a decrease in comparison to a positive change among other demographics is worthy of note. As to why this decrease occurred it is more difficult to determine and again further research is required.

Insert table 2 about here

Qualitative results
Whilst the quantitative results indicated that there had been an overall improvement in student attainment the examination of the qualitative answers presented a very different scenario. When the free text provided by students across both cohorts were examined, disappointingly the researchers found little distinction or improvement

Focus on syntax and systems
In answer to our third research question, our qualitative answers highlighted a number of areas that proved problematic for students.

Misunderstandings for students in the first year of this study mainly surrounded the syntactical application of referencing technique. In the answers provided by students, explaining why a citation was incorrect or problematic, references were frequently made to missing elements such as quotation marks, positioning of the reference itself within the paragraph, or other element focussing on the presentation of the citation. Such features highlight the concern that student experience for "correctness" of referencing technique and indicate a potential lack of broader understanding of the underlying purpose of citation.

S44: "It is not correctly referenced, the reference should be at the end of the sentence with the author's name within the brackets."

S1 : "There is a ',' missing between Karastateva and 2003 where the in text citation for standard Harvard referencing should read (Tsvetkova and Karastateva, 2003)"

S7: "The student is opening and closing the quotes multiple times, however, the reference is only given once"

S133: "Too many quotation marks were used in this sentence. If the student want to add words to a quote for clarity, he could use square brackets."

Where examples required a more nuanced understanding of citation, students were unable to provide a rationale. They tended to provide superficial answers surrounding the application of referencing conventions. Whilst able to identify that there was an error students were unable to determine how it should be corrected. Particular confusion surrounded a question of what constituted "common knowledge". In this example as no details of any author were provided, the majority of students incorrectly deemed the extract as plagiarised.

S28 : "I believe this is plagiarism as although it is a small quote, they have not stated what source they got it from and are trying to pass it off as their own statement"

S53: "There is no reference in this sentence. Should provide evidence to support the statement"

In the second year of the study despite improved performance in the test, students still returned explanations that were reliant on syntax. The explanations suggest that increased attainment did not extend to students having the procedural understanding necessary to generate an explanation as to **why** their response was correct.

S5: "The student has not referenced accurately as it can be seen that in the brackets, authors name and publication date is not separated by commas."

S95: "The student has used too many quotation marks."

S104: "Usage of punctuation marks is wrong."

Identification of blatant plagiarism

From the questions dealing with blatant plagiarism (questions 2, 4, and 7 of the quiz consisting of examples of 'patch' writing and hidden quotations) students were consistently either unable, or we speculate unwilling to identify provided examples as such. The results show that students across both years, both home and international, did not score well in these question (see table 3) and furthermore in year 2, there was a decrease in attainment.

Insert Figure 1 about here
Insert Table 3 about here

Unsure as to what accurately constituted plagiarism they used more familiar aspects of writing on which to base their decisions focussing on syntax, or simply restated their choice that it did not constitute plagiarism.

> *S107: "Byram is spelled incorrectly, which makes the reference incorrect and therefore it is plagiarism."*

> *S55: "Grammar mistake"*

> *S23: "This is not plagiarism."*

Patchwork and paraphrase

The majority of students were unable to identify patchwork plagiarism correctly. Paraphrasing was seen to present problems for students across both years, who when examining the examples provided, struggled to understand the extent to which alteration or restructuring of the original text is required.

> *S49: "The student is using an unnecessary amount of quotes, the writing would flow much better if power phrasing was used instead."*

Discussion

How able are students to identify issues of plagiarism, when presented with examples ranging from 'blatant' and 'subtle'?

The results of the test indicated that students had improved performance after the intervention with an increase pass rate to 80% from 56%. Superficially students demonstrated the declarative knowledge to identify plagiarism in given examples. However, even though initially indicating a higher level of attainment, when the qualitative answers were explored it revealed limited improvement upon the development of procedural knowledge. Wette (2010) who conducted a similar experiment, and found an improvement in declarative understanding but suggested that further understanding was a longer term development. There also appeared to be limitations to declarative knowledge and evidence of a 'non-condemnatory' (Hu & Lei, 2012) attitude towards plagiarism across the cohort both home and international students. Even when dealing with examples of blatant plagiarism, students were unwilling or still uncertain as to whether these could be categorised as such. This result can suggest a number of things; firstly that students are wary of labelling practice as incorrect, secondly that this unease may be predicated upon their increased understanding that plagiarism is 'ill-defined' (Gullifer & Tyson, 2010) and aptly demonstrate how students struggle with applying citation practice to their own work (Power, 2009) even when aware there are issues.

In the immediate term the intervention was limited to an improvement in assessment technique. One explanation for this disappointing result could be found in the lack of feedback from the formative in-class assessment. Feedback has been shown by Horstmanshof and Brownie (2013) and (Wingate et al., 2011) as being particularly beneficial to students, and may have resulted in a superficial engagement by students still in the early stages of developing academic writing skills. Further work is required to explore how future iterations could be improved to promote a deeper level of engagement.

What can the student qualitative answers in assessment reveal about the aspects of citation practice that they find difficult or problematic?

Three areas emerged as troublesome for students. First, patchwork texts, the majority of students were able to correctly identify portions of text taken from various sources and combined as plagiarism. This finding confirms previous studies (Hofer et al., 2012) and reflects a potential weakness of information literacy. Second, similar to Gunnarsson et al., (2014), paraphrasing was identified as widely problematic. Such was the level of misunderstanding of paraphrasing that in the student text answers we found several incidences of this being referred

to as "*powerphrasing*". Third, there was confusion as to what could be labelled as "common knowledge" with students struggling to determine how this should be interpreted.

Overwhelmingly the majority of answers provided by students to explain their decisions focused on syntax and the presentation of a reference. The answers provided by students did not demonstrate procedural knowledge as to how a reference could be corrected but instead highlighted their confusion.

Can any comparisons be drawn between home and international students understanding of citation practice as an educational activity?

The performance of international students in our study suggests that in contrast to existing research (Bretag et al., 2014; Duff et al., 2006) there is little to indicate a lack of declarative understanding or awareness of the requirements of academic practice. Questions emerge however regarding distinctions in the development of procedural knowledge of academic writing between demographics, given the reported increased rate of incidences of plagiarism at later stages of study. Previously identified factors such as lower levels of self-efficacy (Ogilvie & Stewart, 2010) among international students appear far more influential in cases of plagiarism and could perhaps be better understood as stymying of developing procedural understanding .

In terms of developing academic writing as an educational activity where students are less confident in their English language ability (particularly international students) we speculate that adopting a cautionary approach or 'ethico-legal' (Adam et al., 2017) positioning of academic writing may well have had a negative impact. The appraisal of students' ability to identify plagiarism as a credit bearing assessment, whilst successful in promoting engagement, may well be counterproductive and reflected in a decrease attainment. We suggest when considering academic practice education, efforts for international student groups would perhaps be better concentrated on building confidence and self-efficacy in writing in English, rather than focussing on developing immediate declarative understanding.

Conclusions

Despite intervention academic writing remained opaque for most students both home and international. Fundamental aspects of academic writing such as paraphrasing proved persistently problematic. Whilst students were able to more clearly determine that there *were* problems with given examples, their ability to determine *why* these were problems showed no significant improvement. We can speculate that this may be a shortcoming of the intervention itself, as even though utilising a summative assessment students did still did not appear to engage deeply, which further work is required to remedy.

Our finding of the high level of attainment of international students in comparison to home students in the assessment of declarative knowledge of academic practice, provides further avenues for exploration of academic writing education and the longer-term development of procedural understanding. Further research is required determine if there are distinctions in this development and if so how academic education support can be adapted accordingly.

Disclosure statement

No potential conflict of interest was reported by the authors.

Notes on contributors

Elaine Tan is a lecturer in the Marketing department at Newcastle University Business School. Her research interests include technology enhanced and online learning as well as student practices.

Sarah Carnegie, Lecturer at Newcastle University Business School, leading and teaching on various undergraduate module related to human resource management and business consultancy, drawing on her career as an HR Consultant and Quality Assessor. She focusses on integration of work integrated learning into the curriculum related to employability, and the transition of students into HE and their acquisition of academic and professional skills.

References

Adam, L., Anderson, V., & Spronken-Smith, R. (2017). 'It's not fair': policy discourses and students' understandings of plagiarism in a New Zealand university. *Higher Education*, *74*(1), 17–32.

Ashworth, P., Freewood, M., & MacDonald, R. (2003). The student lifeworld and the meanings of plagiarism. *Journal of Phenomenological Psychology*, *34*(2), 257–278.

Awdry, R., & Sarre, R. T. (2013). An investigation into plagiarism, motivations and prevention techniques: Can they be appropriately aligned? *International Journal for Educational Integrity*, *9*(2), 35–49.

Khang, D.B, Khai D.B, Lam, Q. D., Le, D. T. B. A., Nguyen, P. L., Nguyen, P. Q., & Pham, Q. L. (2017). Student plagiarism in higher education in Vietnam: An empirical study. *Higher Education Research & Development*, *36*(5), 934–946.

Bamford, J., & Sergiou, K. (2005). International students and plagiarism : An analysis of the reasons for plagiarism among international foundation students. *Investigations in university teaching and learning*. *2* (2),17–22.

Beckman, J., & Rayner, G. (2011). Embedding academic-professional collaborations that build student confidence for essay writing: Student perceptions and quality outcomes. A Practice Report. *The International Journal of the First Year in Higher Education*, *2*(2), 83–90.

Bretag, T., Mahmud, S., Wallace, M., Walker, R., McGowan, U., East, J., Green, M., Partridge, L., & James, C. (2014). 'Teach us how to do it properly!' An Australian academic integrity student survey. *Studies in Higher Education*, *39*(7), 1150–1169.

Carless, D. (2009). Trust, distrust and their impact on assessment reform. *Assessment & Evaluation in Higher Education*, *34*(1), 79–89.

Childers, D., & Bruton, S. (2016). "Should it be considered plagiarism?" Student perceptions of complex citation issues. *Journal of Academic Ethics*, *14*(1), 1–17.

Devlin, M., & Gray, K. (2007). In their own words: A qualitative study of the reasons Australian university students plagiarize. *Higher Education Research & Development*, *26*(2), 181–198.

Duff, A. H., Rogers, D. P., & Harris, M. B. (2006). International engineering students— Avoiding plagiarism through understanding the Western academic context of scholarship. *European Journal of Engineering Education*, *31*(6), 673–681.

Elias, R. Z. (2009). The impact of anti-intellectualism attitudes and academic self-efficacy on business students' perceptions of cheating. *Journal of Business Ethics*, *86*(2), 199–209.

Gopee, N., & Deane, M. (2013). Strategies for successful academic writing — Institutional and non-institutional support for students. *Nurse Education Today*, *33*(12), 1624–1631.

Gullifer, J., & Tyson, G. A. (2010). Exploring university students' perceptions of plagiarism: a focus group study. *Studies in Higher Education*, *35*(4), 463–481.

Gunnarsson, J., Kulesza, W. J., & Pettersson, A. (2014). Teaching international students how to avoid plagiarism: Librarians and faculty in collaboration. *The Journal of Academic Librarianship*, *40*(3), 413–417.

Hofer, A. R., Townsend, L., & Brunetti, K. (2012). Troublesome concepts and information literacy: Investigating threshold concepts for IL instruction. *Libraries and the Academy*, *12*(4), 387–405.

Horstmanshof, L., & Brownie, S. (2013). A scaffolded approach to discussion board use for formative assessment of academic writing skills. *Assessment & Evaluation in Higher Education*, *38*(1), 61–73.

Hu, G., & Lei, J. (2012). Investigating Chinese university students' knowledge of and attitudes toward plagiarism from an integrated perspective. *Language Learning*, *62*(3), 813–850.

Hu, G., & Lei, J. (2015). Chinese university students' perceptions of plagiarism. *Ethics & Behavior*, *25*(3), 233–255.

Levine, J., & Pazdernik, V. (2018). Evaluation of a four-prong anti-plagiarism program and the incidence of plagiarism: A five-year retrospective study. *Assessment & Evaluation in Higher Education*, *43*(7), 1094–1105.

Lines, L. (2016). Substantive editing as a form of plagiarism among postgraduate students in Australia. *Assessment & Evaluation in Higher Education*, 41(3) 368-383

Newton, F. J., Wright, J. D., & Newton, J. D. (2014). Skills training to avoid inadvertent plagiarism: Results from a randomised control study. *Higher Education Research & Development*, *33*(6), 1180–1193.

Newton, P. (2016). Academic integrity: A quantitative study of confidence and understanding in students at the start of their higher education. *Assessment & Evaluation in Higher Education*, *41*(3), 482–497.

Ogilvie, J., & Stewart, A. (2010). The integration of rational choice and self-efficacy theories: A situational analysis of student misconduct. *Australian & New Zealand Journal of Criminology*, *43*(1), 130–155.

Pecorari, D. (2003). Good and original: Plagiarism and patchwriting in academic second-language writing. *Journal of Second Language Writing*, *12*(4), 317–345.

Pecorari, D., & Petrić, B. (2014). Plagiarism in second-language writing. *Language Teaching*, *47*(3), 269–302.

Power, L. G. (2009). University students' perceptions of plagiarism. *The Journal of Higher Education*, *80*(6), 643–662.

Price, R., Becker, K., Clark, L., & Collins, S. (2011). Embedding information literacy in a first-year business undergraduate course. *Studies in Higher Education*, *36*(6), 705–718.

Selwyn, N. (2008). 'Not necessarily a bad thing …': a study of online plagiarism amongst undergraduate students. *Assessment & Evaluation in Higher Education*, *33*(5), 465–479.

Shaw, P & Pecorari, D 2018, Why so many questions about plagiarism? in D Pecorari & P Shaw (eds), *Student Plagiarism in Higher Education: Reflections on Teaching Practice.* Society for Research into Higher Education Series, Routledge, pp. 1-11.

Walker, J. (2010). Measuring plagiarism: Researching what students do, not what they say they do. *Studies in Higher Education*, *35*(1), 41–59.

Wette, R. (2010). Evaluating student learning in a university-level EAP unit on writing using sources. *Journal of Second Language Writing*, *19*(3), 158–177.

Wilkes, J., Godwin, J., & Gurney, L. J. (2015). Developing information literacy and academic writing skills through the collaborative design of an assessment task for first year engineering students. *Australian Academic & Research Libraries*, *46*(3), 164–175.

Wingate, U. (2007). A framework for transition: Supporting 'learning to learn' in Higher Education. *Higher Education Quarterly*, *61*(3), 391–405.

Wingate, U., Andon, N., & Cogo, A. (2011). Embedding academic writing instruction into subject teaching: A case study. *Active Learning in Higher Education*, *12*(1), 69–81.

Young, D. (2013). Perspectives on cheating at a Thai University. *Language Testing in Asia*, *3*(1), 6.