

“Aren’t they going to cheat the system?” Tackling academic integrity and writing using a Turnitin practice site

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Since 2014, we have run a Moodle site where students can upload drafts to Turnitin to check their originality reports. A common response to this practice site is concern that students will “cheat the system”, by simply changing words to avoid text matches. This response overlooks evidence that poor academic practice frequently occurs when students transition to unfamiliar academic integrity practices (Gullifer and Tyson, 2010; Newton, 2016). It also overlooks the educational value that text-matching software offers. At STARS 2015, we presented research demonstrating that students can use Turnitin to improve their writing and academic integrity. In 2016, we developed a self-paced, online module in which students learn to write with academic integrity using Turnitin. We also developed training resources for staff. We argue that our resources assist students to transition successfully into academic integrity practices, and to achieve confidence in their work. Here, we share our resources and showcase their wide impact.

Introduction

Learning how to write with academic integrity is, for many students, a core part of their transition into university. However, evidence shows that students often plagiarise and use poor academic practice during that transition (Gullifer and Tyson, 2010; Newton, 2016). In many cases, as a recent study from the University of Sydney found, the majority of plagiarism cases can be identified as negligent attribution or citation practices, rather than intentional acts of academic misconduct (Academic Misconduct and Plagiarism Taskforce, 2015 p. 2). To combat such issues, as well as intentional acts of plagiarism, most universities use text-matching software. The most widely used is Turnitin, which matches text found in student assignments to print, journal, and internet sources to produce an “Originality Report”. While Turnitin does not typically assist with issues such as contract cheating, it does enable students and staff to see whether students’ work uses appropriate citation practices – particularly when it comes to quotations and paraphrasing.

It would seem that text matching software offers an educational opportunity to enable students to write with academic integrity, yet there remains a view across the sector that the software is principally a punitive device. For example, the news that our institution has a Turnitin practice Moodle site in which students can upload their work to check its originality and redraft it is often met with surprise. Frequently, we are asked whether students use the practice site to cheat the system, by altering words to lower the similarity percentage. Furthermore, a punitive approach is still widely seen (Sutherland-Smith, 2014, p. 30). Many institutions’ academic integrity policies and websites indicate that Turnitin is used to “detect” plagiarism, rather than to teach students about academic integrity (University of Melbourne, 2017; University of Sydney, 2016; University of New South Wales, 2017). Such punitive approaches overlook the value that such software offers to students who wish to learn how to write with academic integrity.

Looking globally, however, there is a fast-growing body of literature that supports an educational rather than punitive approach to using Turnitin. This research recommends that

students be taught how to use Turnitin to achieve academic integrity in formative assessment (Bailey & Challen 2015; Buckley & Cowap, 2013; Kostka and Maliborska, 2016, p. 20; Stetter, 2013; Silvey, Snowball & Do, 2016). Conducted in the contexts of face to face education, where students attended workshops and received individualised instruction, this literature places a strong emphasis on enabling students to check their draft work to make changes before submitting their final assignments.

It seems that this educational approach is set to become more widespread in the Australian higher education sector. Some institutions are using an educational approach to Turnitin (Australian National University, 2017; Monash University, 2015; University of Adelaide, 2017; University of South Australia, 2016; University of Western Australia, 2017). These institutions encourage students to use Turnitin to view their own originality reports, so that they can amend any issues before submitting the final version. This sea-change is promising, as it means that transitioning students are better supported.

Yet it is not simply enough for policies to be written or revised. Despite institutional policies which may promote Turnitin as an educational tool, Rees and Emerson (2009) found that even after attending staff training on educative uses of Turnitin, staff perceptions of its use do not necessarily change, and many still see it as a punitive tool for plagiarism detection. As Bretag et al. (2014, p. 1150) argue, there is a pressing need for a “holistic approach that engages students about academic integrity”. Universities need to implement resources for staff and students that support the educative approach. Such an approach includes better curriculum and assessment design, clarifications in policy, and a range of educational and training supports within institutions (Bretag et al., 2014).

Within such a holistic approach, online academic integrity resources play a crucial role for in-time student learning and institutional support. In many universities, online resources are provided in the form of online academic integrity modules. Studies such as Belter and du Pré’s (2009) have demonstrated that the use of such modules to educate students can reduce the occurrence of plagiarism in undergraduate courses. The value of educative approaches such as classroom interventions and online modules can significantly reduce rates in plagiarism (Owens and White, 2013).

However, while many institutions use online academic integrity modules, few have in-depth resources that assist students to use Turnitin to improve their writing. Within the literature discussed above, it is clear that the favoured approach to teaching students about Turnitin is to provide face-to-face instruction and feedback on student work. While this is an ideal educational strategy, it is a resource-intensive process. Given that a great number of students within each institution could benefit from in-time instruction about using Turnitin, we need to examine how to make such valuable education scalable. Yet currently there is a lack of research into the resources that can be used to teach students and train staff about academic integrity and text-matching software.

In response to this gap in practice and the literature, we argue that an online module offers a much-needed way to provide scalable education and support for students to learn how to use Turnitin to write with academic integrity. Our project involved the creation and implementation of a self-paced, universal design-based, interactive online module about using Turnitin to write with academic integrity. Furthermore, it teaches students to write well and with authority. In this good practice report, we argue that creating educational resources that teach students how to improve their work using text-matching software is a priority, particularly to assist transitioning students. We present our module’s resources, which have had a wide-ranging

positive impact on students who are transitioning to tertiary academic integrity practices. Our resources not only support transitioning students, but also assist them to write successfully and confidently with academic integrity. Further, our staff training materials provide a consistent message across the institution about using the software as an educational rather than punitive tool. In this report we explain the development of these online, self-paced resources and present the impacts they have had on education about academic integrity within and beyond our institution. The following sections outline the resources we produced and demonstrate the impact the module has had across the institution.

Our resources

In response to the need for online, in-time resources that teach students how to interpret text matches and address issues with academic integrity, we designed six lessons within our learning management system, Moodle. The project team collaborated to create a series of principles to guide the design of these online resources. These principles reflected both the policy of the university around using Turnitin as an educational tool, building a positive culture around academic integrity, and creating a safe space for students to learn appropriate referencing and citation techniques. The design principles included: presentation must be visually appealing with good use of images and video; easy to navigate and move between sections; content is easy to understand and light on jargon; sustainable and easy to maintain; and accessible to all users regardless of device, ability, or background. This framework is known as Universal Design for Learning, or UDL, and advocates that all online learning resources are designed to be as inclusive as possible (Rose & Gravel, 2010). To this end, the team developed resources that were available in multiple formats and sizes of text, video, audio, included closed captions for all videos, and with clear navigation to allow for students to move around the site easily. It was also designed to be responsive to different devices, including mobile phones and tablets.

The six lessons cover the topics: referencing; interpreting Turnitin originality reports; quoting; paraphrasing and summarising; miscellaneous matches; and improving your writing. Each lesson includes short text descriptions of the topics, and examples showing Turnitin text matches in context. For more complex and interactive aspects of interpreting text matches and editing work, students can view videos within the relevant lessons. The lessons also include a short quiz at the end for students to test their understanding of the topic. For example, the lesson on paraphrasing and summarising shows how broken text matches in Turnitin can indicate that the student did not sufficiently paraphrase the source material (Figure 1).

What is wrong with this text match?

Publication
Tanaka, J.. "The role of color in high-level vision", Trends in Cognitive Sciences, 20010501 Full Source View

curate shape representations of a scene are not necessary and may even detract from the experience of the painting. For example, a painting from Monet's famous series of water lilies (Fig. 1) depicts forms that are so strongly associated with particular colors, such as blue water and green vegetation, that the colors themselves convey the objects and mood of the scene without the need for detailed shape representations. In direct contrast to the Impressionist artists, who exploited color associations.

Tanaka et al. argue that Monet's *water lilies* depict forms that are very strongly related with particular colours, such as blue water and green vegetation, and that as a result, it is not necessary to have detailed images and objects in the picture.

It is an insufficient paraphrase because it uses too many of the same non-technical words as the original.

It is a paraphrase that is missing a citation.

It is missing a citation and is an insufficient paraphrase. This is because it uses too man of the same non-technical words as the original. To paraphrase appropriately, it is necessary to explain the idea in your own words rather than re-use the author's words.

Figure 1: Quiz question on paraphrasing

Going further than interpreting individual text matches, we also demonstrate how Turnitin can be used to improve students' authorial voice. It is crucial for students to foreground their own ideas and argument within essays, and developing authorial voice and citation practices can help to show the student's own ideas (Hyland, 1999, 2002). Typically, in well-written academic essays the strongest examples of authorial voice occur in introductions, conclusions, paragraph topic sentences and when paraphrasing and analysing research. When students heavily draw on other sources, and/or show minimal analysis and voice, they are at risk of failing the assessment requirements. We have found that Turnitin can illustrate to students when the use of other sources overshadow their own authorial voice. Within the lesson on improving writing, we explain a step by step process of developing a clear authorial voice, and resources demonstrate where text matches ideally occur within essays. The quiz question below (Figure 2) illustrates this teaching point.

If this were your paragraph, what should you do to improve your authorial voice?

Should you exercise if you want to reduce your risk of developing cardiovascular disease?

"Regular exercise has a favourable effect on many of the established risk factors for cardiovascular disease" (Myers, 2003, p. 1). "This association is generally stronger when the high activity group in a study is compared with a sedentary group rather than when the comparison group has a moderate level" (Berlin & Colditz, 1990, p. 624). A number of large meta-analyses have investigated the relationships between exercise and cardiovascular health. The quote above by Myers (2003) summarises the findings well, mainly that regular exercise is a protective factor against cardiovascular disease, by reducing the risk factors associated with the disease. Further, the research of Berlin and Colditz has shown that there is a dose-wise relationship, whereby increasing exercise produces greater benefits (1990, p. 624). "This association is generally stronger when the high activity group in a study is compared with a sedentary group rather than when the comparison group has a moderate activity level" (Berlin & Colditz, 1990, p. 624). These results are significant because meta-analyses such as these employ highly favourable methodological approaches (Tanasescu, 2002, p. 5).

Keep it as it is.

Rewrite the topic sentence using your own words, not a quote.

Remove all the text matches.

Figure 2: Quiz question

Learning and teaching resources for students and staff: achieving a high impact

Impact for students

Our module has had a significant impact on students' learning and familiarity with academic integrity. The practice site and the resources were extremely popular with students: over a period of one semester, 3,450 students enrolled themselves in the practice site, and more than 12,000 assignments were submitted to Turnitin. The site was used most heavily around times when major assignments tend to be due, in mid-semester and the end of semester (see Figure 3). This indicates students were using it as part of their active writing process for assignments. With the resources available on demand, the students were able to utilise them as part of their "just-in-time" preparation of assignments.

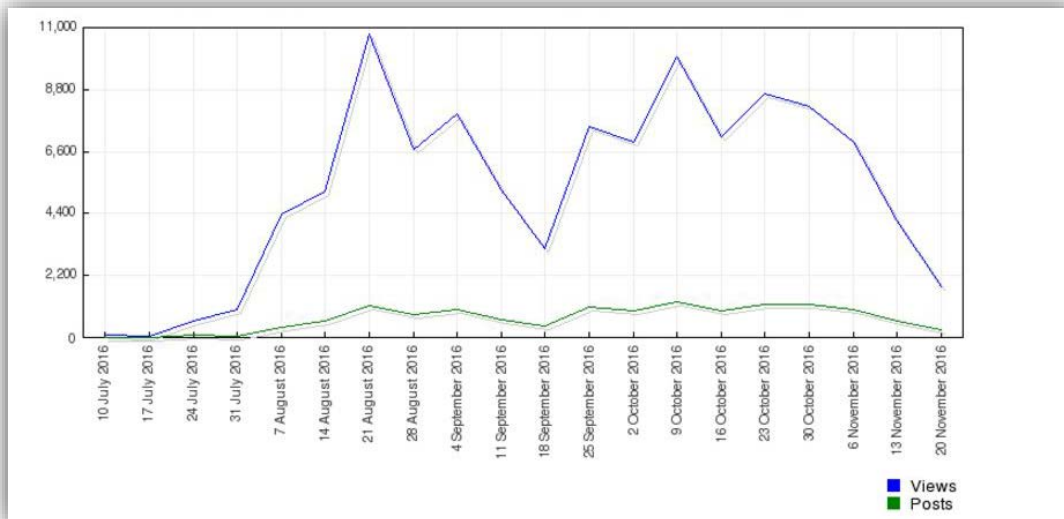


Figure 3: Student views and posts during semester

While the Turnitin submission was the most utilised part of the site, there were 638 unique users who accessed the lessons on academic integrity and writing. This is a significant achievement compared to the numbers of students who might voluntarily attend face-to-face training on the same topic. Each of the lessons were used frequently. For example, the lesson on paraphrasing and summarising was viewed 721 times by 179 students, while the lesson on referencing was viewed over 1000 times by 269 students. This volume of usage indicates a large demand for self-help resources that teach students how to interpret their work’s academic integrity. Furthermore, students returned to the resources at multiple times throughout semester. As the Turnitin practice submissions were provided in the context of learning about academic integrity and writing, students are able to make connections between their Originality Report and academic writing skills required at university.

Students’ responses, and in particular transitioning students’ responses, show that they consider the site’s resources instrumental to their study. Based on an end of semester survey, 96% of 142 respondents stated that they found the resources useful. Qualitative feedback demonstrates that for many transitioning students, the resources enabled them to have confidence in their academic integrity. For instance, one student writes:¹ “In advance applying the Turnitin makes me confident to submit all assignments successfully. Because it provides an opportunity to see how much similarity I have, so that I could make some edition in time not to make any plagiarism.” Another states that the resources “are paramount important and useful for an international student or non-English speaker like me to do advanced academic study successfully.” Two more students enthusiastically echoed these sentiments, and drew attention to the resources’ value as a transitional tool saying: “[the site is] useful especially for newbies” and “I think this Wattle [Moodle] 'course' should be compulsory for all incoming ANU students - a 'learning how to do uni' manual per se. The knowledge that the ASLC site and resources are always there in Wattle have given me a huge grade and confidence boost. Thank you!” Such positive responses indicate that students, especially those who are international and domestic transitioning students, value resources about using Turnitin to write with academic integrity.

¹ The following quotes are written verbatim unless otherwise indicated.

In addition to feedback which shows students' attitudes to the site, it is important to examine what the students learned from the resources. Our resources served two main purposes, the first being to teach students how to use Turnitin to use sources with academic integrity, and the second being to teach students academic writing conventions. From the survey, in which we asked students what they had learned from the lessons, we found that our goals had largely been achieved. Students accurately identified the resources' purposes and key messages. For instance, concerning academic integrity, one student identified that they learned "How to take research notes and how to reference properly." Another writes that there were "Great essay writing and referencing tips," and many more answered with "referencing," "citations," and other technical aspects.

In connection with our goal to teach students persuasive academic writing conventions, one student explained: "cause, for a international student, there are many difference between English writing and Chinese writing, especially, the structure of the article. so, this lesson gives me a lot of ideas of the culture of English writing." Another states "How to avoid plagiarism and writing more academically," and another emphasises that they learned that "Each paper MUST have an argument." Others also followed the lines of "They have allowed me to better understand university writing" and that they learned "How to improve my writing skills." Considering the comments about what students learned from the site – both in terms of academic integrity and writing conventions – it is clear that the resources are successful in supporting transitioning students.

As well as providing resources for students who are transitioning to university study in Australia, for a successful, consistent institutional approach it is crucial to resource staff. As Bretag et al. (2014) make clear, achieving best practice around academic integrity requires a consistent, institution-wide approach. As the next section details, we have created resources for staff to support their students to write with academic integrity using Turnitin.

Impact for staff

To complement the students' Turnitin practice site and resources, we have created a range of resources for staff to use both within and beyond our university. Within Moodle, we created a site for staff which houses the lessons. Any staff member is able to import the lessons into their own course's Moodle site, and they can import either individual lessons or all of them. This staff site has been popular, with over 200 people enrolling last semester.

We have also collaborated with our Academic Standards and Quality Office (ASQO) to produce a self-paced training Moodle site for staff across the university. This project involved collaboration with three teams: the Academic Skills and Learning Centre, ANU Online, and ASQO. The Moodle site includes information on how to set up a Turnitin assignment, how to interpret students' originality reports, and what to do if there is a possible case of academic misconduct. This collaborative approach means that our training site provides an integrated, institutional approach to academic integrity. Particularly because the three teams are central units who work closely with academic staff across the university, the site is a go-to resource for all staff.

Further to our work within the institution, we have also reached out to the sector to promote an educational approach to using Turnitin to teach students academic integrity and writing conventions. We delivered an online, self-paced short course on academic integrity and Turnitin through the ANU Online blog from 26 October – 2 November 2016, which has received over 900 hits, including from staff of University of New South Wales, University of

Canberra, and Australian Catholic University. Our project has made inroads into the sector's approach to supporting academic integrity and using Turnitin as an educational tool. On August 24, 2016, we conducted an international webinar to showcase our approach and resources. Held on 24 August 2016, the webinar had 141 attendees from 16 different countries. During the webinar, we had many questions about our educational approach to using Turnitin and afterwards several people asked for copies of the resources that we had developed. Since the webinar, we have shared our project findings and resources with staff from UNSW and Western Sydney University.

Conclusion

Although there is a push in the higher education sector to provide comprehensive support for academic integrity, the opportunity to provide resources that teach students how they can use text-matching software to achieve academic integrity has not been thoroughly explored. Further, while many opt to teach students about academic integrity and Turnitin in face-to-face contexts, there is a need for just-in-time, online and self-paced resources that cater to students' needs and deadlines. Our resources begin to fill this need. By providing clear explanations and examples of how to use Turnitin to write well and to write with academic integrity, and by giving students the ability to test their knowledge, these resources enable students to take advantage of the text-matching software's educational potential. The resources have been a success, with responses demonstrating that they are particularly valuable for transitioning students, particularly first year and international students. Available under creative commons attribution, these resources can be of benefit to the sector.

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