



THE UNIVERSITY OF
NOTRE DAME
A U S T R A L I A

GUIDELINE:

USE OF TEXT-MATCHING APPLICATIONS FOR FOSTERING ACADEMIC INTEGRITY

Purpose:	To provide guidance for staff in the use of text-matching applications as part of a broader strategy for fostering academic integrity in students.
Responsible Executive:	Deputy Vice Chancellor, Academic
Responsible Office:	Deputy Vice Chancellor, Academic
Contact Officer:	Manager, Learning and Teaching Office
Effective Date:	February 2016
Modification History:	Created: May 2014
Last edited:	March 2019
Applicability	All Campuses
Support Documentation	POLICY: Student Academic Integrity
Communication Strategy:	Workshops for academic staff, online information for students and staff
Quality Monitoring	Impact on incidences of student plagiarism in assessment items

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1 PREAMBLE

These guidelines have been developed to support the POLICY: Student Academic Integrity.

Online text-matching applications are in widespread use in higher education and are generally recognised as being a valuable tool in developing students' understanding, skills and competency with regard to academic integrity by allowing them to check their own work.

Text-matching software can also be used by academics for detecting potential occurrences of student plagiarism. They can assist staff to detect where text has been directly copied from another source, indicating a need for closer inspection. However, text-matching applications do not detect plagiarism as they cannot interpret the context or how the text has been used in an assignment and are unable to distinguish between correctly cited or unattributed sources. It is also important to recognise that it is possible for students to intentionally circumvent the accuracy and reliability of text-matching software.

2 EFFECTIVE USE OF TEXT-MATCHING SOFTWARE

Academic integrity is an integral part of any academic discourse and is needed to:

- Protect the academic credibility and reputation of a University
- Defend the standards of a University's courses and awards
- Ensure that students receive credit for their own work
- Protect the work of authors and contributors.

The use of text-matching software has been shown to reduce levels of plagiarism among students and the evidence shows that it will be most effective if it is used as part of a broader approach for fostering academic integrity.

The following provide some practical guidance for academics:

- Develop a culture of academic integrity and intellectual honesty at all levels of study.
- Ensure assessments are created in a manner which makes adherence with academic integrity more likely (i.e designing out plagiarism):

While academics should not expect that students will act unethically, it is also expected that academics will make it difficult for students to plagiarise, collude and contract cheat. Strategies for preventing cheating include for example: low stakes and formative assessment tasks; new essay topics every semester and/or use of alternatives such as poster presentations or weblogs; tasks that require students to submit different sections of the task at different stages throughout the semester; requiring students to document and submit the process towards the end product; reflections; and tasks linked to class work. All of these can be submitted through text-matching software (see Hrasky & Kronenberg, 2011 for a summary of research supporting these practices).

- Ensure staff and students understand and are aware of their responsibilities for academic integrity:

A statement regarding text-matching in the course outline is essential, all academics (permanent and casual) should play a proactive role in educating students about academic integrity.

- Develop and assess students' skills and understanding in academic writing practices.
- Provide opportunities for students to obtain feedback on work and to correct unintended referencing or citation issues prior to final submission of items for assessment.
- Consider adopting a first draft submission approach to enable students to correct their work:
When students are able to submit drafts to the text-matching software prior to final submission of their assignment, students can see what percentage of the task is from a particular source. Brick (2011) reported the following student comments on being given this opportunity for formative feedback: "Basically, I used it in order to make sure that I had not copied anything"; "Yes, it helped me to convince myself that it is better to arrange one's own thoughts rather than copy them and make them seem as your own".
- Teach students referencing skills:
Kennedy, Finlay and McDermott (2011) reported that of those who responded (43%), almost 90% of students found the text-matching reports useful and made use of reports.
- Provide teaching staff and students with clear guidance for using text-matching software, including how to interpret and apply the findings reports:
Evidence demonstrates that when academics are consistent in their interpretation of originality reports (in Turnitin) and explicitly share this with students there is a reduction in similarity values. A flow-on effect is that academics save time marking (there are fewer scholarship errors) and need to spend less time investigating 'unintentional' plagiarism and appeals (McCarthy & Rogerson, 2009).

3 REQUIREMENTS FOR USE OF TEXT-MATCHING APPLICATIONS AT NOTRE DAME

At present Blackboard SafeAssign and Turnitin are the text-matching applications approved for use at The University of Notre Dame Australia. There are advantages and shortcoming with both systems and Schools need to make an informed decision about which system best meets their needs.

Schools are advised to take a consistent approach by using the same application for all their courses. This will help avoid confusion among academics and students, as well as the need to provide training and support for two different systems.

The Dean is responsible for approving which text-matching application is to be used in their School. This decision should be based on the scope of online sources covered (e.g. relevant journal databases) and, since both systems are designed to be integrated within online assessment workflows, it should also take into account any existing online grading and feedback practices or any planned developments in this area.

Comparative information about the two applications is provided in Appendix 1: *Safe Assign and Turnitin Compared*.

Deans or their delegates are responsible for ensuring all teaching staff using text-matching applications receive adequate training before using text-matching applications. See Blackboard for reference guides and/or contact the Learning and Teaching Office (LTO) for information on training workshops.

It is also essential that Schools follow a consistent approach to using and interpreting reports.

Course Coordinators must include the relevant information about the use of SafeAssign or Turnitin in their course outlines prior to each new teaching period. For details refer to the Assessment section on the Course Outline Template [N: Administration/QMO/Shared/Unit Outlines/Unit Outline Documents](#).

The assignment coversheet on the Library website: <http://library.nd.edu.au/home/style> includes a declaration that states:

DECLARATION - This assignment is my own original work. No part of this work has been copied from any other source or person except where due acknowledgement is made, and no part of the work has been previously submitted for assessment at this or any other institution. I have read the Student Academic Integrity Policy and understand its implications. For the purposes of assessment and standards, I give the University permission to retain this assignment; provide a copy to other assessors; and evaluate its academic integrity through the use of a plagiarism checking service (which may store a copy of the assignment on its database for future plagiarism checks).

When using text-matching software as part of their teaching, academic staff are responsible for ensuring their students understand how the text-matching application in use works, including how to generate originality reports and interpret and apply the information they provide.

4 REFERENCES AND FURTHER INFORMATION

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

Bretag, T. (2016). *Handbook of Academic Integrity*. Springer Research.

Brick, B. (2011). *From stick to carrot – using Turnitin to help improve students’ writing*. Retrieved from <https://www.heacademy.ac.uk/resource/stick-carrot-using-turnitin-help-improve-students-writing> on 14 January, 2016.

Carroll, J. (2007). *Handbook for Deterring Plagiarism in Higher Education* (2nd ed.). Oxford: Oxford Centre for Staff and Learning Development, Oxford Brookes University.

Education Academy. <https://www.heacademy.ac.uk/search/site/turnitin>

Hrasky, S., & Kronenberg, D. (2011). Curriculum redesign as a faculty-centred approach to plagiarism reduction. *International Journal for Educational Integrity* 7(2), 23-36.

International Journal for Educational Integrity. <http://www.edintegrity.com/>

JISC Plagiarism Home Page. <https://www.jiscmail.ac.uk/cgi-bin/webadmin?A0=PLAGIARISM>

Kennedy, F., Finlay, J., & McDermott, J. (2011). *Using Turnitin reports as a tool for supporting and enhancing student learning*. Paper presented at the eLearning in Health Conference: Collaboration, sharing and Sustainability in the Current Environment, Birmingham.

Macdonald, R., & Carroll, J. (2006) Plagiarism—a complex issue requiring a holistic institutional approach. *Assessment and Evaluation in Higher Education*, 31(2), 233-245, DOI: 10.1080/02602930500262536.

McCarthy, G., & Rogerson, A. (2009). Links are not enough: Using originality reports to improve academic standards, compliance and learning outcomes among postgraduate students. *International Journal for Educational Integrity* 5(2), 47-57.

Plagiarism Portal. <http://plagiat.htw-berlin.de/start-en/>

Sutherland-Smith. (2008). *Plagiarism, the internet and student learning: improving academic integrity*. New York: Routledge.

Turnitin website. http://turnitin.com/en_us/resources

The University of Notre Dame Australia Learning and Teaching Office and Academic Enabling and Support Centre.

Appendix 1

Safe Assign and Turnitin Compared

From Semester 1 2016 the anti-plagiarism tool Turnitin will become available for staff to use in their Blackboard (Bb) course sites. Safe Assign, which is already available in Bb, will be retained as an alternative text-matching service for 2016 and Schools will be able to choose which of the two systems to use. This arrangement will be reviewed at the end of 2016 to ascertain if there is a need for Safe Assign to continue to be available.

Safe Assign and Turnitin can each be deployed using the Bb Assignment tool in a way that allows text-matching to be integrated with the processes of assignment submission, marking and the provision of written feedback to students. In Turnitin the online grading and feedback functions are distinct from the Bb assessment functions and are accessed through the GradeMark application which appears as a tab in a Turnitin Direct Assignment.

In most situations Turnitin will provide superior coverage of online databases for text-matching purposes.

In planning the move to Turnitin Schools should also consider their current online grading and feedback practices or any future developments in this area. GradeMark offers more flexibility and functionality than Bb does for providing online comments and feedback, including 'drag-and-drop' capability and comments libraries. However, for Schools that are already making extensive use of the online assessment functions in Bb a move to GradeMark will likely involve some re-design to course sites. Some loss of existing functionality for Grade Center and rubrics should also be expected.

The following tables provide a comparison of the various functions offered by the two systems based on the latest version of the Turnitin Blackboard Direct Integration. This should be used as a guide only and staff using Turnitin should be familiar with how Turnitin functions within the Bb Learn environment prior to making a decision to deploy it in their course sites.

<i>Accuracy and coverage of text-matching</i>	<i>Turnitin</i>	<i>Safe Assign</i>	<i>Comments</i>
Matching journals	✓	✓	Turnitin has access to a more extensive range of journals than Safe Assign.
Matching other student submissions	✓✓	✓	Both will match to papers submitted by Notre Dame students equally well. However, Turnitin is more likely to detect papers submitted in other institutions as it has a much larger client base.
Matching "recycled" papers that have been previously submitted for assessment	✓✓	✓✓	No difference.
Matching websites	✓	✓	No difference; both systems have their limits.
Matching online papers – essay mills and file-sharing sites	✓	✓	Both can access papers on the web as PDFs etc., but not where uploaded material is held in certain file formats such as GIF or JPG or hidden behind firewalls. Neither will detect original assignments purchased online.

<i>General considerations</i>	<i>Turnitin</i>	<i>Safe Assign</i>	<i>Comments</i>
System reliability	✓	✓✓	The text-matching service for each system is remotely hosted. For Turnitin this includes assignment submission, online grading and feedback functions. If the Turnitin service is down students will not

			be able to submit assignments. However, in Safe Assign these functions are managed through the usual Bb assessment tools which are locally hosted. This means if the Safe Assign text-matching service is unavailable students will still be able to submit assignments provided Bb Learn is still available.
Time taken for generation or originality reports	✓	✓✓	Approximately 2-5 minutes for both systems in normal circumstances. Reports for re-submitted assignments in Turnitin will take longer (up to 24 hours in some cases). At peak times in the US both systems can have slower turn-around for reports.
Tracking of submissions Bb administrator	✗	✓	Bb administrator access allows tracking of the entire Safe Assign submission process for individual student assignments. This is not readily available for Turnitin.

<i>Staff use – creation and set up for submission of assignments</i>	<i>Turnitin</i>	<i>Safe Assign</i>	<i>Comments</i>
Editing existing assignments	✓	✓✓	Issues can occur when copying over Bb Course sites. If this happens any Turnitin assignments affected need to be re-created from scratch. This function may have been improved in the new version of the Turnitin Bb Integration. Safe Assign assignments are readily copied and additional features are available e.g. date manager to adjust the due dates to a new semester.
Group assignments	✗	✓	Safe Assign has a group assignment functionality. This is not available in Turnitin.
Multiple file submission	✓	✓✓	Safe Assign and Turnitin both allow multiple files to be uploaded. However, in Turnitin this can only be achieved using a using ZIP file format.
File types (text-matching) and size limits	✓	✓	Safe Assign and Turnitin both only match text for text-based file formats (DOC, PDF, ODT, HTML, TXT, PPT). The file size limit for Turnitin is 20 MB for an individual file (200 MB for zip file upload). Safe Assign has a 500 MB limit.
Grade Centre set up	✓✓	✓✓	Both create columns automatically in the Grade Centre.
Grading rubrics	✓	✓✓	At present Bb provides superior grading rubric functionality including direct access to rubrics from the My Grades tool and the Assignment submission area prior to submission. Turnitin rubrics do not allow for marking ranges to be used and will only return whole numbers to the Grade Centre. Unlike Bb rubrics, Turnitin rubrics cannot be made directly available to students prior to completion of the grading process. Turnitin rubrics do not integrate with the Bb Goals. Bb rubrics are fully integrated with this functionality. It is possible to generate Turnitin Originality Reports without losing any of the functionality offered by the Bb Assessment tool (including

			Bb Rubrics). To do this a Turnitin Direct Assignment must be created in addition to the Bb Assignment link for the specific purpose of generating an Originality Report.
Opt out for submission to paper database	✓✓	✓✓	Both systems allow instructors to exclude the submissions from the global database.

<i>Staff use – marking assignments</i>	<i>Turnitin</i>	<i>Safe Assign</i>	<i>Comments</i>
Anonymous marking	✗	✓	Safe Assign provides an option that allow the identity of the student to be hidden from the marker. At present this is not available with Turnitin in Australia, but it is available in the UK – so may become a future option.
Delegated marking	✗	✓	The delegated marking function in Safe Assign enables multiple markers to be assigned to individual or groups of students. This is not available in Turnitin.
Revisions / multiple attempts	✓	✓✓	Both provide a setting to allow for a single submission or unlimited attempts to be submitted until the due date. Safe Assign allows for a set number of attempts to be defined. This is not available with Turnitin.
Uploading on behalf of students	✓✓	✓	Turnitin allows instructors to upload student assignments in bulk or individually. Safe Assign only allows for individual upload.
Inline commenting on assignments	✓✓	✓	Safe Assign and Turnitin allows free text commenting, but only Turnitin has a comments library. See below.
Comment and annotation libraries	✓✓	✗	Turnitin allows individual users to create and share libraries. They can be built during the marking process, re-used in any subject for that user and shared via email with others. Libraries can also be centrally set-up (e.g. by School administration support) and shared between instructors. Turnitin provides drag and drop functionality for adding comments. Safe Assign has no comments libraries, academics must manually enter all written feedback.
Mobile marking	✓	✓	iPad only for both using the “Turnitin Mobile” or “Bb Grader” apps. Turnitin originality reports can be accessed from mobile while Safe Assign reports cannot.
Submission history	✗	✓	Turnitin does retain a submission history. However, once the lecturer has cleared any past attempts they can no longer be accessed (where multiple attempts are enabled). Safe Assign retains a record of all submissions and marking activity.
Notes for multiple markers	✗	✓	Safe Assign has a function that allows markers to leave notes or comments for other markers to see. This is not available in Turnitin.
Bulk download	✓	✓✓	Both offer bulk downloading. Safe Assign offers it directly from the Grade Centre and will download it as anonymous if setup that way.

<i>Feedback and revision</i>	<i>Turnitin</i>	<i>Safe Assign</i>	<i>Comments</i>
Feedback from Grade Centre	✘	✓	Any feedback entered from the Grade Centre will conflict with Turnitin and may not be visible depending on how it was entered.
Record of student having accessed feedback	✓	✘	Turnitin has a column that shows the marker whether a student has looked at the returned assignment. This is not available in Safe Assign.
Controlling release of marks	✘	✓✓	Turnitin can specify a release date for all marks but does not control the visibility of the Grade Centre column. With Turnitin release of marks to Grade Centre must also be controlled using the Grades and Assignment dates settings.

<i>Student use – assignment submission</i>	<i>Turnitin</i>	<i>Safe Assign</i>	<i>Comments</i>
Assignment access	✓	✓✓	Both systems allow access from any Bb content area. However, if the Turnitin system is down, the assignment cannot be submitted. If Safe Assign is down, the assignment will still be submitted and checked for originality once available.
Submission using Bb mobile app	✘	✓	The Bb Student app allows submission to Safe Assign but not Turnitin assignments.
Email confirmation of submission	✓✓	✓	Turnitin sends a confirmation as well as displaying the receipt on-screen. Safe Assign only offers students an on-screen receipt, but it sends a notification to the lecturer. Students can see their submission after it is complete.
Accessing marks	✓✓	✓✓	Students can access their marks from the Grade Centre with either system.
Accessing feedback	✓	✓✓	Accessing feedback on a Turnitin assignment takes a few more clicks in the My Grades and is less visible than Safe Assign.
Access via mobile app	✓	✓	Marks are available on the mobile app in the My Grades tool if either system is used. However, access to full feedback with Bb mobile may be limited.