

Interpreting a Turnitin® Similarity Report

Have you ever wanted to understand the basics of reviewing a Turnitin® (TII) report and interpreting the similarity score?

This **Guide** outlines the similarity score, common types (or patterns) of text matches, and identifying the sources of text matches – information which contributes to understanding and interpreting a similarity report. It also presents practical strategies for managing the review of TII reports as part of the assessment marking process.

Refer to another Guide in this series, [Navigating a Turnitin® Similarity Report](#), for an overview of how to access and navigate the TII report via learnonline, how to view text matched sources, and how to refine the report outcomes through filters and settings.

Interpreting the Similarity Score

The TII software used at UniSA is a text-matching tool. It compares text-based submissions with an online repository of internet sources and documents to generate a report showing the matches it has identified, along with the percentage similarity (called the similarity or originality score). A similarity report can only tell you whether similar fragments or blocks of text have appeared in the repository, not whether it's been used correctly or appropriately.

What's an acceptable similarity score?

This is a common question asked by both staff and students alike. The short answer is... there is no magic number! A number alone is not a reliable indicator of whether plagiarism or other academic misconduct has occurred (see Mphahlele & McKenna 2019). Each assessment is designed for its own unique purpose, with its own criteria and anticipated performance levels. Every TII report will have its own story reflecting a range of contextual factors.



	Light blue: 0% matching text
	Dark blue: 1-24% matching text
	Yellow: 25-49% matching text
	Orange: 50-74% matching text
	Red: 75-100% matching text

Every TII report will have its own story reflecting a range of contextual factors.

- [Interpreting the Turnitin Similarity Report](#), video webinar, 12 Nov 2019, Turnitin® (1h 3min)
- Oxford Brookes University (2011) [How to interpret 'Turnitin' reports](#), video, YouTube, 16 Feb 2011 (8:46 min)
- Tamra Ulpen & Sandra Barker (2020) [Interpreting Turnitin reports and identifying signs of potential misconduct](#), video webinar, TIU UniSA (1h 26 min).

What if the similarity score is very high?

A high similarity score is a flag or indicator that the assignment and the TII report needs careful review. However, a high similarity score doesn't necessarily indicate plagiarism. It could be generated due to text matches with:

- Reference lists
- Direct quotes
- Templates and headers /footers used by all students in the course
- Common phrases, series of words and terminology often used
- Course textbook

The assignment type should also be considered. For example, a creative writing assignment requiring original writing, will usually generate a much lower score than a research report, which is reliant on conversing with and acknowledging a wide range of scholarly sources.

And while a 100% match might look alarming, it could simply indicate that the student has submitted the assignment before as a draft, which has been matched with a previous submission under a different file name.

What if the similarity score is very low?

It's not accurate to assume that work with a low similarity score is necessarily free from plagiarism.

Bear in mind, the similarity score is a percentage match, so always consider the word length of the assignment. For example, a 10% similarity match of a thesis could represent as much as 40 pages worth!

Once again, the assignment type should be considered. It would be highly unusual for a research report to generate a very low similarity score, so there may be other problems that need to be investigated. For example, text modifications may have been made with the use of hidden characters, etc. as an attempt to disguise plagiarism.

Generating either a high or low similarity index score can indicate a range of factors that should be investigated. Therefore, it's important to open and examine the TII report in more detail.

Ideally, each TII report should be opened and reviewed. In practice, opening all reports may not be feasible, particularly in courses with large enrolment numbers. At the end of this Guide, we'll outline one approach that may assist markers to efficiently look at reports across a class for a cursory review, and provide a level of confidence that misconduct has not been overlooked.

Interpreting Matches

The TII report allows you to view in more detail the text in a submission that has been matched with other sources. A simple first step in reviewing is to enter the **Match Overview** panel of the report and scan the submission for the range and type of different matches.

What are some of the common patterns, or types, of matches to look out for? The examples below have been adapted from (Newcastle University 2013).

Block match

A “word for word” match to an existing source.

A common cause of intercultural conflict and misunderstanding is ethnocentrism. Ethnocentrism is the use of one's own culture to interpret all other cultures. Ethnocentric people tend to interpret the actions, customs, values, religion, codes and behaviours of other people using their own culture as a guide. They view their own culture as the 'central' culture and, in interacting and communicating with members of different cultures, use their own cultural norms as the central point of reference.

Example scenario(s)	Notes
<p>A block of text has been cut and pasted from an existing source, without quotation marks or citing the source.</p>	<p>Blocks of matching text may demonstrate deliberate copying or a lack of academic skills.</p> <p>If the source is another student submission, then more detailed investigation may be warranted.</p> <p>It may be that one has copied from the other, or that both have drawn from a common, third source, not showing in the database such as a book, textbook, handbook, or even the assessment questions and instructions.</p>
<p>A block of text has been cut and pasted from a legitimate source. The source has been referenced correctly (quotation marks included and an in-text citation to the original source).</p>	<p>TII's bibliographic filter could be used to exclude quotes and present a more refined similarity score.</p> <p>Note the filter won't disregard matches where single quotation marks '...' have been used.</p> <ul style="list-style-type: none"> • Excluding quotes and bibliographic materials, Turnitin®

Scattered word match

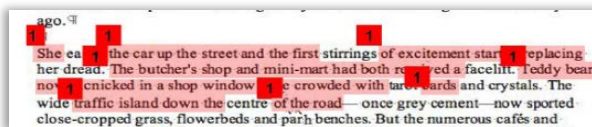
Multiple short text strings matched to a single source

She eased the car up the street and the first stirrings of excitement started replacing her dread. The butcher's shop and mini-mart had both received a facelift. Teddy bear now picnicked in a shop window once crowded with tarot cards and crystals. The wide traffic island down the centre of the road—once grey cement—now spotted close-cropped grass, flowerbeds and park benches. But the numerous cafés and restaurants still did a bustling trade. This was still the same wide street. Class Falls

Example scenario(s)	Notes
<p>A student has made a poor attempt to paraphrase a legitimate source.</p>	<p>Check the source been cited and included in the reference list.</p>
<p>Scattered words with a high overall percentage match to another student submission</p>	<p>Review for the use of common words or terms that might be normally expected to be used.</p> <p>Check the extent of similarity which may indicate the use of a previous assignment as a template for constructing the submission.</p>

Checkerboard match

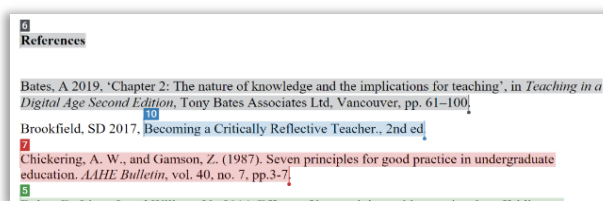
Strings of matched text separated by short words or phrases



Example scenario(s)	Notes
A student has made a poor attempt to paraphrase a legitimate source.	Check the source been cited and included in the reference list.
Copied text with an attempt to prevent a TII match by replacing selected words and phrases.	Requires a closer investigation of the match.

Bibliography match

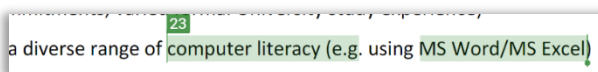
Reference matches can contribute to a significant percentage match. Text matches in the reference list commonly show a rainbow of different sources for each entry rather than one specific match.



Example scenario(s)	Notes
The reference list the key texts in the discipline, course readings, and articles relevant to the assignment.	<p>Check the validity and relevance of references included for the discipline/assignment. Are any 'questionable' references included (eg inappropriate to the topic, discipline, language)?</p> <p>Use TII's bibliographic filter to exclude reference lists from text matches.</p> <ul style="list-style-type: none"> • Excluding quotes and bibliographic materials, Turnitin®
Reference list copied from another source (ie single colour text match).	Requires a closer investigation of the match.

Trivial match

Matches to common short phrases or unrelated words



Example scenario	Notes
Significant percentage of match to everyday words or phrases common to the discipline.	<p>Use the filters and settings panel to exclude sources less than a number of words, or a certain percentage of words.</p> <p>Specific sources can also be excluded via the Match Overview or All Sources panels.</p> <ul style="list-style-type: none"> • Navigating a Turnitin® Similarity Report, T&L Guides, TIU, UniSA (pdf) • Excluding quotes and bibliographic materials, Turnitin® • Excluding sources, Turnitin®

Investigating sources

A key feature of the TII report is the ability to review in detail the specific sources to which the text has been matched. To investigate further, use the **All Sources** breakdown to navigate through the matches.

Types of matched sources:

Source	Notes
Journal article or other internet source	<p>Large matches from a single source, such as a journal article or website, may represent quotations, poor paraphrasing or direct copying.</p> <p>Has the student used quotation marks to mark direct quotes? Is the source cited appropriately? Scan the reference list and check for acknowledgement of the source.</p>
Student paper at UniSA	<p>If a student has submitted the same material as another UniSA student, the full source of the previous submitted works will be identified by TII.</p> <p>A 100% match to a student paper usually means that the source is the student's own work. Submissions of drafts should automatically be excluded from the report but may show be matched if submitted under a different file name. (In that case you can manually exclude that source to recalculate the similarity report.)</p> <p>Note that deleting a paper from the assignment box does not remove it from the TII database, so deleted papers (from another class assignment or another student in the same class) can also show as matched sources on a report.</p> <ul style="list-style-type: none"> • Why is a student paper self-matching?, Turnitin® • Viewing excluded sources, Turnitin® • Excluding sources, Turnitin®
Student paper at another institution	<p>When matches are associated with a paper submitted at another institution, you will not be able to access the original source (i.e. the student's work). You can only request that information from TII.</p>
Multiple student paper(s) across institutions	<p>It is common for TII reports to identify text matches with a variety of sources, including submissions from other students in the same class, across the University, or from institutions elsewhere.</p> <p>Most often this is because students have used the same references and quoted from the same key sources, or incorporated discipline specific terminology and phrasing which might be difficult to uniquely paraphrase. An assignment may have required students to use a common template, or to submit standardised evidence or components (such as a certificate or an equation). Assignment questions or instructions may have been reproduced as part of the submissions.</p> <p>The same source (eg a course textbook) may have been used across several institutions, with students lifting sentences or passages and incorporating into their own work. In the case of many books or textbooks, TII will identify the matched sources as other papers which contain the same material, rather than show a match with the original source. If you use a course textbook, can you identify the same phrases used throughout the student submissions? Is material appropriately quoted and cited? Or are there examples of poor paraphrasing, or even direct copying?</p>

	If you are satisfied that a high proportion of matches relate to acceptable similarities, then these can be considered 'irrelevant' matches that are influencing the overall calculation of the similarity index score. Use the filters and settings to refine and recalculate the similarity score.
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If, after reviewing the similarity scores, TII report text matches and sources, you suspect that plagiarism or collusion has occurred, refer the matter along with all available information (including the TII report) to an Academic Integrity Officer in your Academic Unit to see if an investigation of academic misconduct is warranted.

- See a list of [AI contacts in Academic Units](#) at the TIU Academic Integrity page
- [Enhancing Academic Integrity in your Course](#), T&L Guide, TIU (pdf)
- [Navigating a Turnitin® Similarity Report](#), T&L Guides, TIU, UniSA (pdf)

A Strategy for Efficiently Reviewing TII Reports

The TII report is an invaluable tool for identifying those assessments that need to be referred for an academic misconduct investigation. When TII reports are considered together, across a cohort, it may also aid teachers in evaluating course design and teaching, particularly in relation to academic skills in referencing or paraphrasing.

Ideally, each TII report should be opened and reviewed. In practice, opening all reports may not be feasible, particularly in courses with large enrolment numbers. The strategy outlined below can assist markers to efficiently look at reports across a class for a cursory review, and provide a level of confidence that misconduct has not been overlooked.

Steps	Actions
1. Pre-empt the issue affecting the similarity score	<p>Let's revisit all the contextual factors which may generate a high similarity number. Pre-empt which of these may be the reason(s) for text matches generated for your assessment.</p> <ul style="list-style-type: none"> • Reference lists • Direct quotes • Templates and Headers /Footers used by all students in the course • Common phrases, series of words and terminology often used • Course Textbook • Assessment/Text type
2. Sample across high, low, average similarity scores	<p>Once the submissions are uploaded, scroll down the class list and gauge what the average similarity index score for the assignment is.</p> <p>Take note of any reports that are significantly above and below this score.</p> <p>Randomly open a few TII reports within the average range to investigate what is generating similarity matches.</p> <p>In most cases, your findings will confirm your initial expectations. E.g. you requested the students use the same template or there are references to the course textbook, etc.</p>

	<p>Once satisfied these are common features appearing in most of the students' reports, and that misconduct has not occurred, return to any of the reports with high (or low) similarity scores noted earlier.</p> <p>Now review these reports to investigate further.</p>
3. Review selected submissions	<p>You may wish to flag certain submissions for attention on the basis of the work itself or your knowledge of the students – for example, when marking you noticed that the use of language is nonsensical or confused, the subject and references are off topic, or the performance level is higher than expected.</p> <p>It is advisable to also look at the reports of students you may have concerns about even if they fall within the average similarity range.</p>

If you would like to ask online teaching and learning questions related to your course, you can look through our [FAQs](#), write to TIU@unisa.edu.au, have an [online consultation with a member of the TIU](#) or complete the online modules as part of [*Introduction to Engaging Learners Online*](#).

References

Mphahlele, A. & McKenna, S. (2019) The use of Turnitin in the higher education sector: Decoding the myth. *Assessment and Evaluation in Higher Education* vol 44, no. 7, pp 1079-1089. <https://doi.org/10.1080/02602938.2019.1573971>.

Newcastle University (2013) Using Turnitin More Effectively: Staff Resource Booklet, https://www.newcastle.edu.au/_data/assets/pdf_file/0008/90368/Staff-Turnitin-Resource-Booklet_July2013.pdf