

1. Introduction

This document provides comprehensive guidance to staff on the detection and reporting of three forms of academic misconduct: plagiarism, self-plagiarism, and collusion. Separate guidance is available for staff on the Detection and Reporting of Contract Cheating.

Heriot-Watt University's <u>Student disciplinary policy and procedures</u> offers the following definitions of the different types of cheating referred to in this guide:

Plagiarism: "The presentation by a student of work for assessment which is not his/her own, in the sense that all or part of the work has been copied from that of another person (whether published or not) without attribution."

Self-plagiarism or Duplication: *"Copying and reproducing work that was originally completed and submitted by the student and resubmitted for another purpose, including examinations, without acknowledgment of this, unless resubmission was permitted".*

Collusion: "Where a student undertakes work with or for others, without acknowledgement (e.g., submits as entirely his/her own work, completed in collaboration with another person)"

All markers at HWU have a responsibility to detect and report plagiarism and collusion when it occurs. This guide aims to provide clear guidance to staff on detection and reporting to ensure a consistent approach across our schools, programmes, and courses.

2. Turnitin Similarity Detection Software

Turnitin similarity checker is the software used by HWU to help in the detection of plagiarism and collusion. The software searches the internet and assignment databases for matching text. A similarity report is then produced which highlights identical sequences of text, details which sources they match to, and provides an overall similarity percentage for the submitted work.

Although staff and students are generally well versed in the use of Turnitin, it is often misunderstood. Some are under the impression that Turnitin is a 'plagiarism detector' that provides a 'plagiarism score' for a piece of work. Many believe there is a threshold percentage below which the work is considered to be plagiarism

free; anything over that percentage indicates that the student has plagiarised. **This is NOT true** and can lead to student practices that will harm the quality of their work (*e.g.*, repetitive use of paraphrasing in an attempt to reduce the similarity score). <u>Turnitin is a similarity checker, not a plagiarism detector</u>.

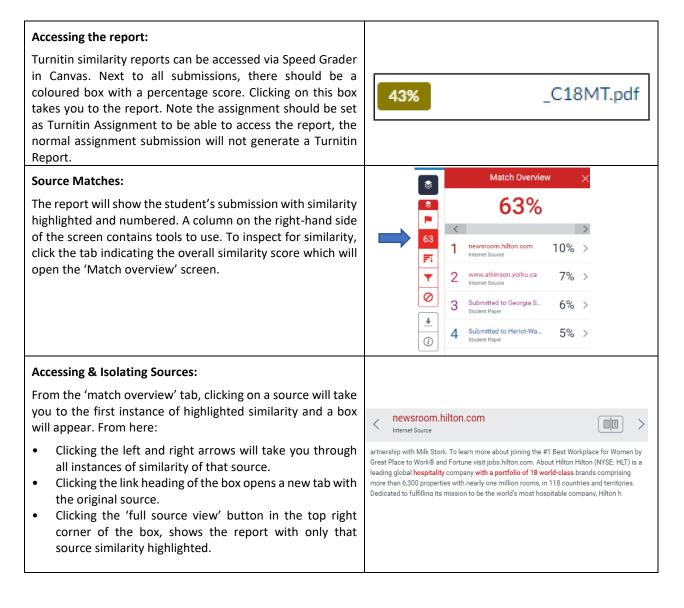
Staff must <u>NOT</u> suggest to students that there is an 'acceptable' level of similarity. A high Turnitin score does not necessarily mean plagiarism has occurred. Submissions with many quotes, a long reference list, or an appendix may increase the similarity of a document, but this is not evidence that a student has passed another's work off as their own. Equally a low score is not evidence that plagiarism has not occurred. Students may be using detection avoidance strategies (see section 7) or may have plagiarised one specific part of a document representing a small overall percentage of their submission, thus resulting in a lower score.

<u>All Turnitin reports, regardless of similarity score must be</u> <u>checked by the marker to ensure plagiarism has not occurred</u>. Academic judgement is required to interpret the report and investigate if an allegation of plagiarism is warranted.

Academics detect plagiarism, not Turnitin.

2.1 How to use Turnitin Tools

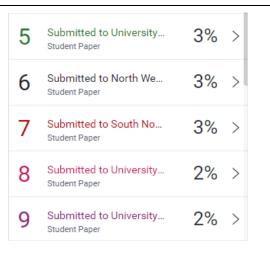
There are several tools available in Turnitin that aid in the detection of plagiarism and collusion. The table below explains how each tool should be used.



Student Paper Sources:

Some sources will match to 'student papers' from other Universities. This is usually not an indication that the student has taken work from a student at another University, it is an errant result from Turnitin's similarity matching algorithm. Students from different Universities may have taken work from the same source. In these cases, rather than similarity being attributed to that original source, similarity is attributed to the submission of another student who has copied the same work. Taking the highlighted section and putting it into quotation marks into an internet search engine will usually reveal the original work.

If there is no match, this could indicate collusion with someone outside of the University. By clicking on the matching source, you can request access to the similar document.



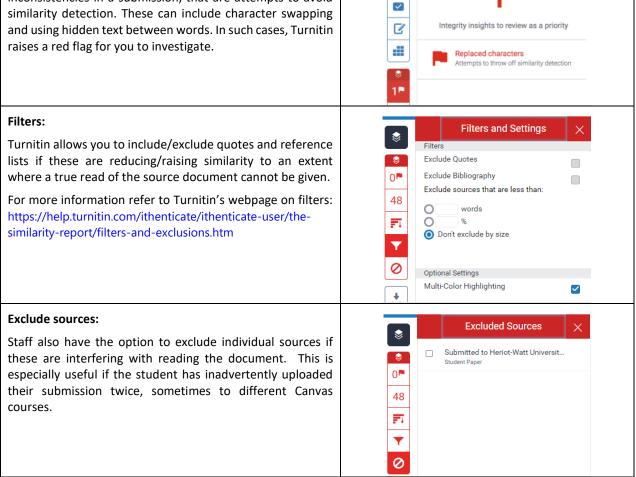
Flags for Review

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Red flags:

Turnitin's algorithms can at times detect suspicious inconsistencies in a submission, that are attempts to avoid



3. Identifying Plagiarism

Similarity alone does not necessarily indicate plagiarism, but the absence of attributing work to its true author does indicate plagiarism. Therefore, when examining work, you should ask two questions:

- a) To what extent is the student's work similar to another source? When answering this question, you are looking for real efforts to summarise and interpret other work in a meaningful way. Indicators of plagiarism would be:
 - Straight copy and paste, with the absence of quotation marks,
 - Excessive use of quotation marks throughout the submission,
 - Long matching paragraphs with only a few words changed to synonyms,
 - Long paragraphs where sentences have been restructured, but content and argument remain the same.
- **b)** To what extent is the original author credited? When answering this question, you are looking for real efforts by the student to tell the reader where the information has come from. Indicators of plagiarism would be:
 - No in-text citation of the original author in the relevant section/s,
 - Only inclusion of the original author in the reference list,
 - In-text citation of the original author, but not in a section that would suggest credit is being given.

These two questions rely on a marker's judgement on whether they believe a student is taking credit for work that is not their own. if the marker is not sure and has suspicious, they should refer and ask for guidance from their school's chair of SDC. Provided below is an example of plagiarism.

Plagiarism example

Original Source: Palthe, J., 2014. Regulative, normative, and cognitive elements of organizations: Implications for managing change. *Management and organizational studies*, 1(2), pp.59-66

"Institutional theory has generated a significant volume of work over the past three decades (Aten & Howard-Grenville, 2012; Aldrich, 1994; Dacin, 1997; Lawrence, Winn, & Jennings, 2001; Peng & Heath, 1996; Sherer & Lee 2002; Suchman, 1995; Zilber, 2012), yet there is still a paucity of studies showing how institutional systems affect organizational change. Greenwood, Suddaby & Hinnings' (2002) study of professional associations and the transformation of institutional processes is a rare example. Of the other studies that do exist, most have emphasized the importance of regulative and cognitive pressures in driving institutional change (e.g., Delbridge & Edwards, 2013; Heracleous & Barrett, 2001; Huy, 2001)."

Student Submission – match identified by Turnitin

popular in economics and politics theory. Institutional theory has generated a significant volume of work over the past three decades (Aten & Howard-Grenville, 2012; Aldrich, 1994; Dacin, 1997; Lawrence, Winn, & Jennings, 2001; Peng & Heath, 1996; Sherer & Lee 2002; Suchman, 1995; Zilber, 2012), yet there is still a paucity of studies showing how institutional systems affect organizational change. Greenwood, Suddaby & Hinnings' (2002) study of professional associations and the transformation of institutional processes is a rare example. Of the other studies that do exist, most have emphasized the importance of regulative and cognitive pressures in driving institutional change (e.g. Delbridge & Edwards, 2013; Heracleous & Barrett, 2001; Huy, 2001). It understands that a business should interact with the social system in its

In this example, the student has taken a large portion of text from the original source. However, the original author is not cited. The student is clearly giving the impression that they have read the cited sources and formulated that work into an argument. This work has not been done by the student, they are passing off other's work as their own. Even if the original source is included in the list of references, this is plagiarism.

4. Identifying Self-Plagiarism

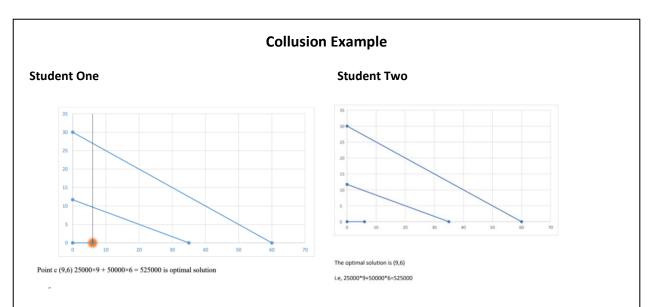
Self-plagiarism examples are typically those flagged up by Turnitin matching work previously submitted by the student for assessment in other HWU courses or at another institution before joining HWU as a direct entrant into year 2 or 3 or as a PGT student. As a rule, students cannot submit work (in full or in part) for summative assessment if it was previously submitted for summative assessment at any institution on any course, i.e., students cannot get credit for the same assessment twice.

However, self-plagiarism can be legitimate if the original submission was purely formative, i.e., the submitted work did not contribute to a course mark or the award of credits.

In synoptic courses and other courses where purely formative assessment is submitted for feedback prior to a final summative submission, staff should advise students whether self-plagiarism is allowed in their course or not. For example, in the 4th year of many HWU Programmes, students complete a synoptic final year project or dissertation spanning both semesters. Typically, students submit a literature review or an interim report via Turnitin in Semester One so that supervisors can provide formative feedback before students then complete their project in Semester 2. Because the Semester One submission is formative students can legitimately incorporate this work into their final report. Consequently, we would expect Turnitin to pick up high levels of similarity in the literature review or perhaps the methodology section of a student's final submission. In these situations, the marker must exclude the student's own 'source' submission from the list of source documents (see section 3). This will then reveal any matches with other source documents.

5. Identifying Collusion

Collusion is typically identified via Turnitin where one student's submission is matched directly with one or more submissions for the same assessment. Collusion in quantitative assessment can be difficult to identify, however it can be obvious if students present identically wrong answers.



In a Take Home Exam two students provided virtually identical incorrect solutions in 2 out of 5 questions. The graphs above have been extracted from the students' responses to one of the questions. In each graph, axis labels are missing, axis scales are incorrect, the formatting is identical and the identified answer is wrong. Furthermore, Student Two has arrived at the same answer as Student One yet they did not indicate how they identified the answer from their graph. Using their academic judgement the course leader concluded that this is not coincidence and the students must have colluded in order to produce the same answers.

Often the chances of two or more students making exactly the same set of mistakes are so remote that this in itself is evidence of collusion. However, the expertise of the lecturer / marker is essential in establishing that the suspected collusion is not a case of coincidence. If a clear case is not presented to the SDC, the panel may not appreciate how unlikely coincidence might be. Usually, annotations on students submissions as supporting evidence helps SDC in their investigation.

6. Strategies Students use to evade detection

6.1 Inserting pictures of text

Similarity detection can be avoided if the submitted document contains pictures of written text, rather than a document of text. Turnitin cannot identify the text within an image and will not identify similarity where it occurs. Such an approach is often easily spotted as follows:

- The text may not appear to sit on the page properly,
- Turnitin may report a red flag that pictures are being used.
- Sections will unusually appear to have NO similarity with any source despite the use of common phrases detected in other sections or the work submitted by other students.

In these cases, the submitted document should be downloaded and inspected. If it is a pdf document the marker should request the original word document from the student reminding the student not to tamper with the document and to ensure they send you the version used to create the pdf, i.e., the last modified date will be before the pdf file was created and submitted. If the student cannot/will not supply the original word version, then this would be evidence to support suspected plagiarism.

6.2 Changing words to synonyms

One approach is for the student to copy and paste work from a source, and then change individual words to synonyms. Turnitin searches for direct matches only, and so changed words will not be highlighted, or considered in the Turnitin score. An example is provided below where the student has reduced similarity in a paragraph from 100% to 62%.

Original text: 100% match to source

Firms employ mimetic isomorphism to cut costs and to prove their legitimacy, particularly in times of technological uncertainty. For example, Ghosal (1988) attributes mimetic isomorphism to the homogeneity of environmental scanning methods by Korean firms; Samsung created a successful model, which was rapidly adopted by the other large chaebols. It is also interesting to note at this juncture that mimetic isomorphism explains to an extent why chaebols only superficially adopted western managerial methods post-1997. Korean firms faced different environmental conditions to those in the West, so they had a greater tendency to imitate each other, rather than foreign organisations. This may also have been affected by cultural factors that included other Korean firms as a part of a wider 'family'.

Student's final Submission: 62% match to source

Firms utilize mimetic isomorphism to slice costs and to demonstrate their authenticity, especially in the midst of mechanical vulnerability. For instance, Ghosal (1988) credits mimetic isomorphism to the homogeneity of ecological checking strategies by Korean firms; Samsung made a fruitful model, which was quickly embraced by the other huge chaebols. It is additionally intriguing to note at this point mimetic isomorphism discloses to a degree why chaebols just externally received western administrative strategies post-1997. Korean firms confronted diverse natural conditions to those in the West, so they had a more noteworthy propensity to mimic each other, instead of remote associations. This may likewise have been influenced by social factors that included other Korean firms as a piece of a more extensive 'family'.

The changing words to synonyms approach can be identified by paragraphs highlighted with similarity all from one source, but with unhighlighted gaps in sentences. Further, the words not highlighted will likely not fit well and appear to be odd choices, e.g. in the example above 'cut costs' is changed to 'slice costs'. Please note the absence of citing the true author defines this approach as plagiarism. If the true author is cited, this could be judged as very poor scholarship, but it is plagiarism none the less and the student should be referred to the School's Disciplinary Committee.

6.3 Essay Spinning

Essay spinning is the use of paraphrasing or 'spin' software to restructure sentences of copied text and employ synonyms to reduce similarity. Paraphrasing software such as <u>QuillBot.com</u> and <u>SpinBot.com</u> can be very effective. These online tools are extremely powerful, and use of their standard functionality is readily available to students for free. More sophisticated paraphrasing, that can avoid similarity detection by Turnitin, can be accessed at a cost. QuillBot also offers a plagiarism checker. The following is an example of essay spinning:

Essay Spinning (Paraphrasing) Example

Original Source: Gupta, A.K. and Gupta, N., 2021. Environment practices mediating the environmental compliance and firm performance: An institutional theory perspective from emerging economies. *Global Journal of Flexible Systems Management*, 22(3), pp.157-178.

"Scholars are reporting corporate efforts towards energy efficiency systems and carbon footprint control (Curtis & Lee, 2019) for environmentally friendly sustainable development in various parts of the world. The active debate among scholars (Goyal et al., 2018; Schubert & Smulders, 2019; Trollman & Colwill, 2020) brings policymakers, practitioners, and society together towards environmental measures."

Spinning using QuillBot.com

Scholars in various regions of the world are reporting business initiatives in energy efficiency systems and carbon footprint control (Curtis & Lee, 2019) for environmentally friendly sustainable development. Scholarly debate (Goyal et al., 2018; Schubert & Smulders, 2019; Trollman & Colwill, 2020) brings policymakers, practitioners, and society together in the pursuit of environmental goals.

6.4 Back Translation

Back translation involves translating the copied text into software to change its language, and then back translating to English. This is easily performed in Google translate:

Back Translation Example

Using Google translate (English > French > English)

Researchers report on corporate efforts in energy efficiency and carbon footprint control systems (Curtis & Lee, 2019) for environmentally friendly sustainable development in various parts of the world. The active debate among academics (Goyal et al., 2018; Schubert & Smulders, 2019; Trollman & Colwill, 2020) brings together policymakers, practitioners and society around environmental measures.

Essay Spinning & Back Translation make changes to the structure and wording of sentences which to varying extents can evade similarity detection. However, the texts usually still contain the same academic references that may generate a similarity match to the source document particularly when several sources are used together to illustrate one point (as in the example above). This would be evidence of plagiarism given the original authors (Gupta and Gupta) have not been cited and the student has implied that they have read and synthesised an argument based on the work of the authors cited.

The more an essay is spun or back translated, the lower the similarity rating will be. However, the result will likely be that original meaning is lost, and paragraphs and language will not seem natural and can be mistaken as poor English. Nevertheless, if work raises a suspicion, markers should refer the case to the School's Disciplinary Committee.

6.5 Should students be given multiple upload attempts and access to similarity reports?

The excessive use of evasive strategies is enabled when students are given multiple submission attempts via Canvas Assignments *and* access to the similarity report. This practice can encourage the adoption of evasive strategies such as 'spinning' and back translation to reduce the similarity score to a level that the student believes (or has been told) is acceptable.

When students are given multiple upload opportunities this can re-enforce poor scholarship practice and unfortunately provide those students inclined to plagiarise with the opportunity to engage in evasive tactics and potentially avoid detection. Therefore, course leaders should think twice before allowing more than one upload of summative assessment.

There may be benefit in allowing two or three upload attempts and visibility of the similarity report in formative assessment if the course lecturer explains to students how they should interpret the similarity report to help improve their academic writing and referencing practice, and that there is no 'acceptable' similarity score.

7. Reporting Plagiarism and Collusion

If you believe plagiarism or collusion has occurred, the next step is to report the allegation. All allegations of academic misconduct must be reported to the relevant School Disciplinary Committee (SDC). Staff must not take action themselves to penalise the student in any way. This is to ensure fairness and consistency to all students across the University. Below is the process that must be followed. Colleagues are encouraged to contact the Chair of their School's Disciplinary Committee for guidance if they are unsure if plagiarism has occurred or not.

Step 1. Notify the student of the allegation

The process begins with the staff member emailing the student to inform them of the allegation. This must be done before any documents are submitted to the Conduct Office for consideration. Students must be informed of the alleged academic misconduct before the release of marks and feedback to the rest of class. A template email can be found <u>here</u>.

Step 2. Gather Evidence and Relevant Documents

Evidence must be gathered for consideration by the relevant School Disciplinary Committee. For convenience save these to a OneDrive folder. Required evidence and documents include:

- **The Turnitin report.** The Turnitin report version of the student's submission should be downloaded from Turnitin. This is the version where text matches are highlighted in colour.
- The original copy of the student's submitted work.
- In cases of Plagiarism and Self-Plagiarism: Copies of the original source documents allegedly plagiarised. Usually copies of the top one or two sources flagged by the Turnitin report would be sufficient. Although in some cases additional sources may be needed if small sections from multiple sources have been plagiarised. In the original sources, staff should highlight the information that the student is alleged to have plagiarised.
- In cases of Collusion: Copies of the coursework submitted by other students involved in the collusion with the sections highlighted that indicate where collusion has occurred.
- A copy of **the email** informing the student of the allegation.
- A copy of the **coursework guidelines/assessment criteria** issued to the students. Details of the assessment, release and submission dates and the contribution (%) of the assessment toward the final course mark.
- Any relevant guidelines issued to students can be included if you believe it is useful. For example, screenshots of links to referencing guidance provided on Canvas course pages, or copies of class announcements outlining the importance of academic integrity or directing students to HW guides on 'How to avoid academic misconduct'.

Step 3. Completing an Incident Report Form (IRF)

After evidence and relevant documents have been gathered, staff should complete an <u>Incident Report</u> Form for each student suspected of plagiarism or collusion. The form is available on the <u>Conduct</u> <u>Office webpage</u>.

- The IRF must be completed in full and contain only factual information. Staff should only complete Parts 1, 2 and 3 of the form. Part 2 must include a description of the alleged incident, and information on the percentage of the total course marks that the piece of coursework/exam is worth.
- No comment should be made in the IRF which the staff member may not want the student to read. The student will receive a copy of the IRF when they are invited to their disciplinary meeting.
- If you are unable to access the source(s) e.g., the source is a student submission at another institution and they have failed to respond to you via Turnitin, you should state this in the IRF.
- List the main sources, whether this be a website, journal article, a former student submission. etc. If you are unable to obtain the source material, or if you have had no response to a request via Turnitin for the source material from another university, this should be noted on the IRF.
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Step 4. Submit the Incident Report Form (IRF) and evidence

The IRF and supporting documents should then be emailed to the University's Conduct Office <u>conduct@hw.ac.uk</u>. Preferably a link to a OneDrive folder should be shared where you have saved all the relevant documentation.

In cases of collusion, although a separate IRF is required for each student (for data protection and confidentiality reasons) all the evidence relating to one case of collusion can be submitted in one folder, i.e., one IRF per student plus their respective submissions and Turnitin Reports showing the matches between the submissions.